31(2)

Fisheries Review

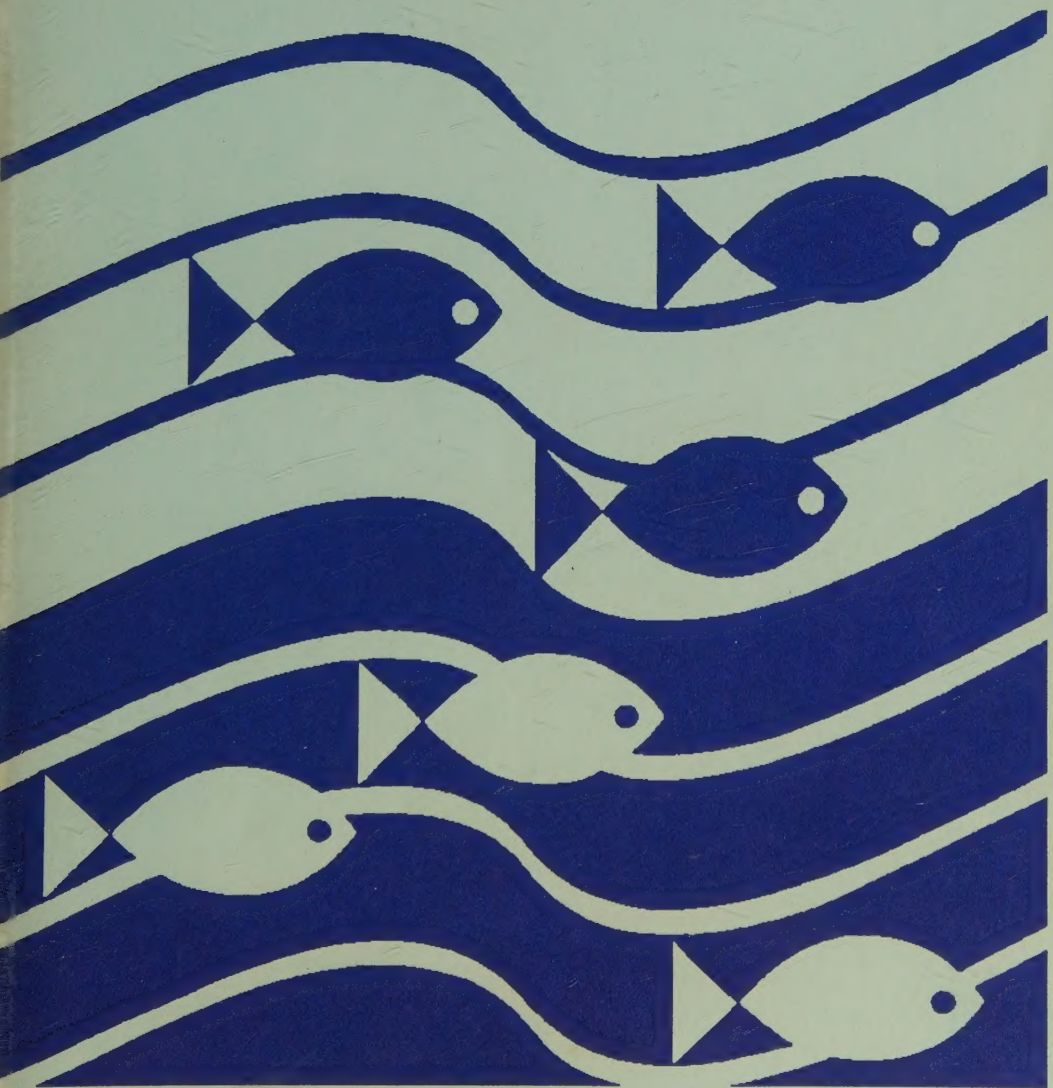
LIBRARY

JUL 1 0 1992

National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

Vol. 37, No. 2, 1992

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE



Fisheries Review

Jeffrey A. Humphrey
Joan W. Stevens
Compilers

U.S. Fish and Wildlife Service
Office of Information Transfer
Data Base Section
1201 Oak Ridge Drive, Suite 200
Fort Collins, Colorado 80525-5589
Phone: (303) 223-9709
FAX: (303) 226-9455

Fisheries Review is intended to furnish fishery biologists with abstracts of current literature in sport, fishery research, and management.

One volume, consisting of four numbers, is issued each year. Each number contains separate Author, Geographic, Taxonomic, and Subject indexes. Authors who publish in journals not screened for *Fisheries Review*, and who would like their publications included, should submit abstracts to the Editor.

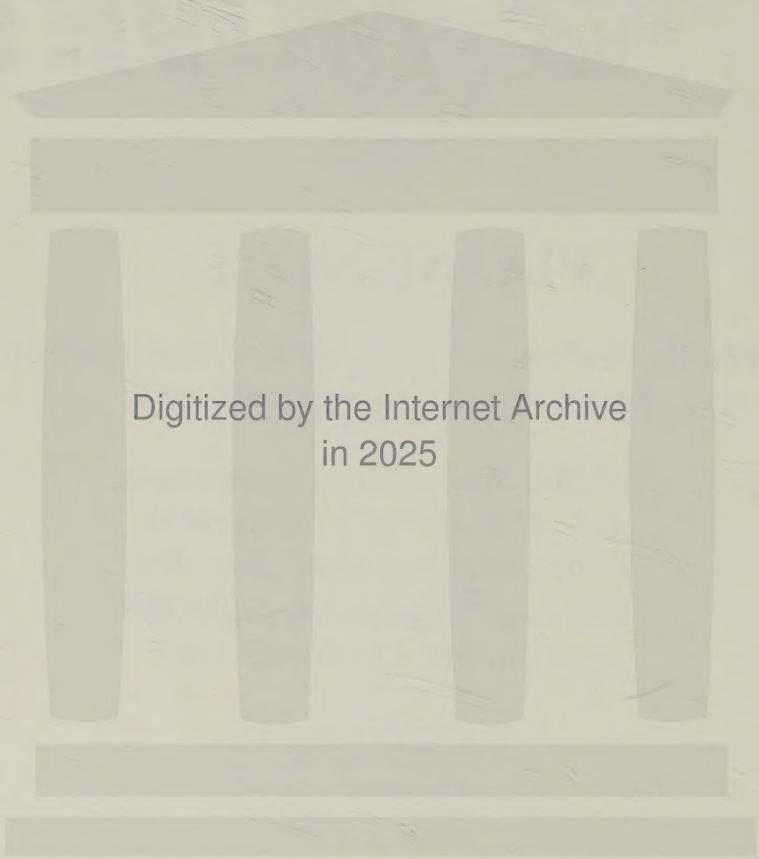
The U.S. Fish and Wildlife Service assumes no responsibility for the accuracy of material from outside sources.

PLEASE NOTE:

Wildlife Review and Fisheries Review moved on May 8, 1992. The new address is

Wildlife Review/Fisheries Review
U.S. Fish and Wildlife Service
Office of Information Transfer
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525-5589

(303) 223-9709


Digitized by the Internet Archive
in 2025

https://archive.org/details/fisheries-review_1992_37_2

Fisheries Review

Vol. 37, No. 2 1992

Contents

CULTURE AND PROPAGATION

General Fish Culture 1
Trout and Salmon Culture 2
Warmwater Culture 6
Mariculture 9
Feeds, Feeding, and Nutrition 10
Transporting Fish 14
Aquariums 15
Miscellaneous Culture Techniques and Equipment 16

LIMNOLOGY AND OCEANOGRAPHY

General 19
Physical 19
Chemical 20
Benthos 20
Plankton 20

MORPHOLOGY, PHYSIOLOGY, GENETICS AND BEHAVIOR

Morphology 20
Physiology 26
Genetics, Variation Studies and Hybridization 45
Behavior 53

NATURAL HISTORY

Life History – General Works 59
Population Studies, Production, Recruitment, etc. 61
Spawning Habits and Movements, Fecundity, etc. 63
Movements, Seasonal and Depth Distribution, etc. 65
Foods/Feeding 67
Age and Growth 70
Geographical Distribution, Fish Surveys, etc. 72
Abundance, Factors of; Survival and Mortality 74
Identification, Keys, Classification 75

PARASITES AND DISEASES

General 77
Bacterial Diseases 78
Fungal Diseases 81
Protozoan Diseases 81
Viral Diseases 83
Other Diseases and Parasites 85

POLLUTION AND TOXICOLOGY

Pollution 89
Fish Kills 93
Toxicology; Bioassays 93

RESEARCH AND MANAGEMENT

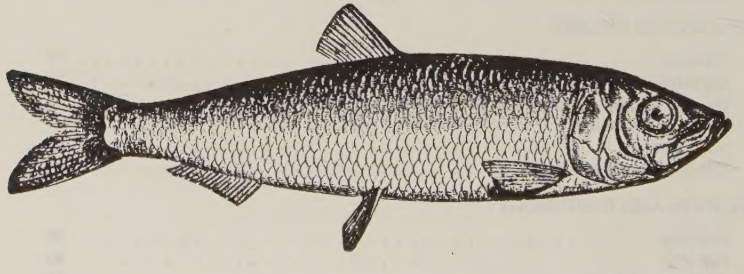
General 103
Administration and Planning 104
Habitat Alterations 104
Harvest, Creel Census, etc. 105
Regulations 106
Fish Control and Removal 107
Marking and Tagging 107
Stocking and Introductions 108
Fishing Gear and Techniques 110
Fishways, Fish Passage Through Dams, etc. 112
Mathematics, Statistical Methods, and Modeling 112
Lake Management and Research 114
River and Stream Management and Research 116
Farm Pond and Small Impoundment Management and Research 119
Large Impoundment Management and Research 119
Estuary Management and Research 120
Marine Management and Research 121
Utilization of Fishery Products 123
Miscellaneous Techniques and Equipment 124
Reviews, Bibliographies, etc. 125
Watershed Management 126
Water Use and Conservation 126
Miscellaneous 126

AUTHOR INDEX (Blue) 129
GEOGRAPHIC INDEX (White) 181
SYSTEMATIC INDEX (Blue) 193

AVAILABILITY OF REPRINTS AND PUBLICATIONS

Fisheries Review does not distribute any of the papers cited herein, nor can the editor of *Fisheries Review* obtain copies of these papers for anyone. A reprint of an article published in a journal may be available from the author, from the organization with which the author is affiliated, or from the publisher of the journal in which the article appeared. When an author's address is known, it is shown in square brackets following the citation. Addresses of most wildlife organizations can be obtained from the Conservation Directory, an annual publication available from the National Wildlife Federation, 1412 16th St., N.W., Washington, D.C. 20036. This directory lists more than 900 agencies and organizations concerned with natural resources use.

Camera-ready copy for this issue of *Fisheries Review* has been generated by computer programs developed by the Data Base Section, U.S. Fish and Wildlife Service, Office of Information Transfer, 1201 Oak Ridge Drive, Suite 200, Fort Collins, CO 80525



GENERAL FISH CULTURE

92-002033 Alba, Francisco; Carlos Manzano; Miguel Mendez; Jose Naranjo; Javier Nunez; Paz Sanchez and Inigo Terry. LAND RECLAMATION BY MEANS OF AQUACULTURE IN SW SPANISH LITORAL. *J. World Aquacult. Soc.* 22(3):12A. 1991. Abstract only. FR 37(2)
[Pemares, Junta De Andalucia, Av. S. Francisco Javier, 28, 8ª, 41071 Seville, Spain]

92-002034 Baisre, Julio A. A REVIEW OF CUBAN AQUACULTURE. *J. World Aquacult. Soc.* 22(3):14A. 1991. Abstract only. FR 37(2)
[Minist. Fish. Ind., Barlovento, Santa Fe 19 100, Playa, Habana, Cuba]

92-002035 Creswell, R. Leroy. A SURVEY OF GOVERNMENTAL POLICY REGARDING AQUACULTURE IN THE CARIBBEAN BASIN. *J. World Aquacult. Soc.* 22(3):21A. 1991. Abstract only. FR 37(2)
[Harbor Branch Oceanogr. Inst., Inc., Fort Pierce, FL 34946]

92-002036 Davlin, Andrew, Jr. RAISING CAPITAL FOR A SMALL AQUABUSINESS. *J. World Aquacult. Soc.* 22(3):22A. 1991. Abstract only. FR 37(2)
[Davlin Corp., P.O. Box 800, Pauma Valley, CA 92061-0800]

92-002037 Enright, Catherine T. AQUACULTURE DEVELOPMENT PLANNING: A CASE STUDY OF QUEENS COUNTY, NOVA SCOTIA. *J. World Aquacult. Soc.* 22(3):23A-24A. 1991. Abstract only. FR 37(2)
[Nova Scotia Dep. Fish., Halifax, NS, Canada B3J 3C4]

92-002038 FAO of the UN. AQUACULTURE PRODUCTION (1986-1989). *FAO Fish. Circ.* 815(Rev. 3):141p. 1991. In English, French, and Spanish. FR 37(2)

92-002039 Flimlin, G. E., Jr. INTIMIDATION AS AN IMPEDIMENT TO INNOVATION AND PROGRESS IN AQUACULTURE. *J. World Aquacult. Soc.* 22(3):25A. 1991. Abstract only. FR 37(2)
[Sea Grant Mar. Advis. Serv., Toms River, NJ 08755]

92-002040 Griffin, B. R. STATUS OF CHEMICALS FOR USE IN WARMWATER FISH PRODUCTION. *Aquacult. Mag.* 18(1):76-78. 1992. FR 37(2)
[Fish Farming Exp. Lab., U.S. Fish & Wildl. Serv., Stuttgart, AR 72160]

92-002041 Gyano, Antal. [CHANGES IN pH OF THE WATER, SUBSTRATE-HUMUS-STABILITY, AND CHANGES IN N AND P IN HUNGARIAN FISH PONDS.] *Oesterreichs Fischerei* 44(10):240-243. 1991. In German. FR 37(2)
[Lab. Hydrobiol., Postfach 47, H-2441, Szazhalombatta, Hungary]

92-002042 Langston, Althaea; George P. Shibley; William L. Thomas; Sarah Anne Goodman and Richard E. Pacer. AQUACULTURE ACTIVITIES: ANIMAL AND PLANT HEALTH INSPECTION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE. *J. World Aquacult. Soc.* 22(3):34A. 1991. Abstract only. FR 37(2)

92-002043 Martin, Jim; Joseph Webster and Gary Edwards. HATCHERIES AND WILD STOCKS: ARE THEY COMPATIBLE? *Fisheries (Bethesda)* 17(1):4. 1992. FR 37(2)
[Dep. Fish & Wildl., P.O. Box 59, Portland, OR 97207]

92-002044 McVey, James P. AQUACULTURE FUNDING IN THE NATIONAL SEA GRANT PROGRAM. *J. World Aquacult. Soc.* 22(3):40A-41A. 1991. Abstract only. FR 37(2)
[Natl. Sea Grant Program, 1335 East-West Hwy., Rm. 5492, Silver Spring, MD 20910]

92-002045 Mitchell, Joan R. THE NATIONAL SCIENCE FOUNDATION'S SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM: FUNDING OPPORTUNITIES FOR AQUACULTURE RESEARCH. *J. World Aquacult. Soc.* 22(3):42A. 1991. Abstract only. FR 37(2)
[Div. Ocean Sci., Natl. Sci. Found., Washington, DC 20550]

92-002046 Nerrie, Brian L. and Albert O. Reid. YOUTH AQUACULTURE AWARENESS PROGRAM IN VIRGINIA. *J. World Aquacult. Soc.* 22(3):44A. 1991. Abstract only. FR 37(2)
[Va. State Univ., Petersburg 23803]

92-002047 Nickum, John G. "HELPING AQUACULTURE GROW"; THE PROGRAMS OF THE U.S. FISH AND WILDLIFE SERVICE CONCERNING AQUACULTURE. *J. World Aquacult. Soc.* 22(3):45A. 1991. Abstract only. FR 37(2)
[820 ARLSQ, U.S. Fish & Wildl. Serv., 1849 C St., NW, Washington, DC 20240]

92-002048 Pradeep, H. S. and T. R. C. Gupta. HYDROGRAPHY OF BRACKISHWATER PONDS AT MULKI, DAKSHINA KANNADA. *Mysore J. Agric. Sci.* 22(1):109-119. 1988. FR 37(2)
[Coll. Fish., Univ. Agric. Sci., Mangalore-2, India]

GENERAL FISH CULTURE (Continued)

92-002049 Rhodes, Raymond J. BUSINESS PLANNING FOR SMALL-SCALE AQUACULTURE VENTURES: AN INTRODUCTION. *J. World Aquacult. Soc.* 22(3):50A. 1991. Abstract only. FR 37(2)
[Div. Mar. Resour., Wildl. & Mar. Resour. Dep., P.O. Box 12559, Charleston, SC 29422-2559]

92-002050 Roper, Bill; David Nelson and Richard Coleman. THE U.S. ARMY CORPS OF ENGINEERS CONTAINMENT AREA AQUACULTURE PROGRAM (CAAP). *J. World Aquacult. Soc.* 22(3):52A. 1991. Abstract only. FR 37(2)
[U.S. Army Corp. Eng., Washington, DC 20314-1000]

92-002051 Rubino, Michael C. WETLANDS REGULATIONS AND AQUACULTURE. *Aquacult. Mag.* 18(1):41-47. 1992. FR 37(2)

92-002052 Sarig, S. THE FISH CULTURE INDUSTRY IN ISRAEL IN 1990. *Isr. J. Aquacult. Bamidgeh* 43(3):103-111. 1991. FR 37(2)
[Cent. Fish Health Lab., Nir David, D.N. 19150, Israel]

92-002053 Sheehan, Betsy P. MARKETING AND PROMOTION MAKE CENT$ FOR THE SMALL SCALE AQUABUSINESS. *J. World Aquacult. Soc.* 22(3):54A. 1991. Abstract only. FR 37(2)
[Dep. Agric., Columbia, SC 29211]

92-002054 Smith, H. and A. J. N. Haig. THE DEVELOPMENT OF A CONTROL POLICY FOR FISH FARMING. *J. Inst. Water Environ. Manage.* 5(6):641-648. 1991. FR 37(2)
[Clyde River Purification Board, East Kilbride, Glasgow, Scotland]

92-002055 Smith, Lewis; Meryl Broussard; Gary Jensen and Deborah Hanfman. PROFILE OF USDA AQUACULTURE PROGRAMS UNDER SCIENCE AND EDUCATION. *J. World Aquacult. Soc.* 22(3):55A. 1991. Abstract only. FR 37(2)
[Agric. Res. Serv., Beltsville, MD 20705]

92-002056 Smitherman, R. O.; Meryl Broussard and Gary Jensen. THE USDA REGIONAL AQUACULTURE CENTER PROGRAM: SERVING INDUSTRY BY COORDINATED RESEARCH AND EDUCATION PROGRAMS. *J. World Aquacult. Soc.* 22(3):55A. 1991. Abstract only. FR 37(2)
[Off. Aquacult., U.S. Dep. Agric./CSRS/SPPS, Washington, DC 20251-2200]

92-002057 Stefan, Gary E. and Joanne M. Kla. FOOD AND DRUG ADMINISTRATION AQUACULTURE INITIATIVES. *J. World Aquacult. Soc.* 22(3):56A. 1991. Abstract only. FR 37(2)
[Cent. Vet. Med., U.S. Food & Drug Admin., Rockville, MD 20857]

92-002058 Tave, Douglas. HOW NOT TO CHOOSE BROODFISH. *Aquacult. Mag.* 18(1):67-75. 1992. FR 37(2)
[Dep. Agric., Univ. Arkansas, Pine Bluff 71601]

92-002059 Taylor, Frank S. OPERATING A SMALL-SCALE AQUACULTURE BUSINESS: HOW MANY HATS CAN YOU WEAR? *J. World Aquacult. Soc.* 22(3):58A. 1991. Abstract only. FR 37(2)
[Atlantec Seafarms, Inc., Yonges Island, SC 29494]

92-002060 Trout, Lamarr. USAID PROJECTS IN FISHERIES AND AQUACULTURE. *J. World Aquacult. Soc.* 22(3):60A. 1991. Abstract only. FR 37(2)
[Off. Agric., Agency Int. Dev., Washington, DC 20523]

TROUT AND SALMON CULTURE

92-002061 Alvarado L., V.; J. W. Schafer; R. Enriquez S. and M. Monras S. [SALMON FARMING IN CHILE, ACTUAL STATE, PROJECTIONS AND SANITARY STATE.] *Medio Ambiente* 11(1):9-14. 1990. In Spanish with English summ. FR 37(2)
[Ictiopatol., Inst. Patol. Anim., Univ. Austral Chile, Casilla 567, Valdivia, Chile]

92-002062 Anderson, J. L. and Y. Kusakabe. THE MARKET FOR FRESH/FARMED SALMON PRODUCTS: SOME RESULTS FOR THE UNITED STATES AND JAPAN. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 153-167. 1991. FR 37(2)
[Dep. Resour. Econ., Univ. R.I., Kingston 02881]

92-002063 Bedell, Gerald W. TRINITY RIVER SALMON AND STEELHEAD HATCHERY, 1990-91. *Calif. Dep. Fish Game Inland Fish. Admin. Rep.* No. 19-17. 13p. 1991. FR 37(2)
Oncorhynchus tshawytscha and *O. kisutch* in California.

92-002064 Brannas, Eva. A COMPARISON OF GROWTH BETWEEN RAINBOW TROUT AND ARCTIC CHARR AT DIFFERENT TEMPERATURES. *Aquaculture* 100(1-3):168-169. 1992. Abstract only. FR 37(2)
[Swedish Univ. Agric. Sci., Dep. Aquacult., Box 1457, Umea S-901 24, Sweden] *Salvelinus alpinus* and *Oncorhynchus mykiss.*

TROUT AND SALMON CULTURE (Continued)

92-002065 Bromage, Niall; John Jones; Clive Randall; Mark Thrush; Briony Davies; John Springate; Jim Duston and Gavin Barker. BROODSTOCK MANAGEMENT, FECUNDITY, EGG QUALITY AND THE TIMING OF EGG PRODUCTION IN THE RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquaculture* 100(1-3):141-166. 1992. FR 37(2)

[Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland]

92-002066 Bugrov, Leonid Yu. RAINBOW TROUT CULTURE IN SUBMERSIBLE CAGES NEAR OFFSHORE OIL PLATFORMS. *Aquaculture* 100(1-3):169. 1992. Abstract only. FR 37(2)

[State Res. Inst. Lake & River Fish., 199053 Leningrad, USSR] *Oncorhynchus mykiss.*

92-002067 Carey, T. G. and G. I. Pritchard. HEALTH PROTECTION FOR SALMONID RESOURCES IN CANADA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 75-84. 1991. In English with French summ. FR 37(2)

[Aquacult. & Resour. Dev. Branch, Dep. Fish. & Oceans, Ottawa, ON, Canada K1A 0E6]

92-002068 Casagrande, F. [DISINFECTION IN FISH CULTURE: ACTOMAR B100 FOR SUCCESSFUL STERILIZATION OF WATER IN INTENSIVE FISH CULTURE.] *Oesterreichs Fischerei* 45(1):30-33. 1992. In German. FR 37(2)

[Indu-Farm AG, Basel, Switzerland]

92-002069 Clarke, W. C. RECENT DEVELOPMENTS IN SMOLT RESEARCH. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 133-139. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002070 Cook, R. H. and W. Pennell, editors. PROCEEDINGS OF THE SPECIAL SESSION ON SALMONID AQUACULTURE, WORLD AQUACULTURE SOCIETY, FEBRUARY 16, 1989, LOS ANGELES, USA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. 167p. 1991. FR 37(2)

[Dep. Fish. & Oceans, Biol. Sci. Branch, Biol. Stn., St. Andrews, NB, Canada E0G 2X0] Individual papers indexed in this issue of *Fisheries Review.*

92-002071 Cornel, G. E. and F. G. Whoriskey. THE EFFECTS OF RAINBOW TROUT CAGE AQUACULTURE ON THE WATER QUALITY, MICROFAUNA AND SEDIMENTS OF LAC DU PASSAGE, QUEBEC. *Aquaculture* 100(1-3):170. 1992. Abstract only. FR 37(2)

[Dep. Renewable Resour., Macdonald Coll., McGill Univ., 21111 Lakeshore Rd., Ste-Anne-de-Bellevue, PQ, Canada H9X 1C0] *Oncorhynchus mykiss* in Canada.

92-002072 Danilowicz, Bret S. and Christopher L. Brown. A NOVEL AND RELIABLE METHOD FOR THE LARVAL CULTURE OF TWO SPECIES OF ORNAMENTAL REEF FISH: *DASCYLLUS ALBISELLA* AND *D. ARUANUS. J. World Aquacult. Soc.*22(3):21A-22A. 1991. Abstract only. FR 37(2)

[Duke Univ. Mar. Lab., Beaufort, NC 28516]

92-002073 Ducey, Ronald D. NIMBUS SALMON AND STEELHEAD HATCHERY, 1990-91. *Calif. Dep. Fish Game Inland Fish. Admin. Rep.* No. 91-16. 10p. 1991. FR 37(2)

Oncorhynchus mykiss and *O. tshawytscha* in California.

92-002074 Fivelstad, Sveinung and Michael J. Smith. THE OXYGEN CONSUMPTION RATE OF ATLANTIC SALMON (*SALMO SALAR* L.) REARED IN A SINGLE PASS LANDBASED SEAWATER SYSTEM. *Aquacult. Eng.* 10(4):227-235. 1991. FR 37(2)

[Bergen Coll. Eng., Lars Hillesgate 34, 5008 Bergen, Norway]

92-002075 Forteath, G. N. R.; B. L. Munday and G. J. Purser. HUSBANDRY AND MANAGEMENT OF RAINBOW TROUT IN SEA-CAGES. *Aquaculture* 100(1-3):170-171. 1992. Abstract only. FR 37(2)

[Natl. Key Cent. Teaching & Res. Aquacult., Tasmanian State Inst. Technol., Launceston, Tasm., Australia] *Oncorhynchus mykiss.*

92-002076 Friars, G. W.; J. K. Bailey and K. A. Coombs. SOME ASPECTS OF SELECTION IN SALMONID AQUACULTURE. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 85-92. 1991. In English with French summ. FR 37(2)

[Salmon Genet. Res. Program, Atl. Salmon Fed., St. Andrews, NB, Canada E0G 2X0] *Salmo salar.*

92-002077 Gall, G. A. E. and P. A. Crandell. THE RAINBOW TROUT. *Aquaculture* 100(1-3):1-10. 1992. FR 37(2)

[Dep. Anim. Sci., Univ. Calif., Davis 95616-8521] *Oncorhynchus mykiss.*

92-002078 Gall, G. A. E., editor. THE RAINBOW TROUT: THE PROCEEDINGS OF THE FIRST *AQUACULTURE*-SPONSORED SYMPOSIUM HELD AT THE INSTITUTE OF AQUACULTURE, UNIVERSITY OF STIRLING, SCOTLAND, 4-7 SEPTEMBER 1990. *Aquaculture* 100(1-3):331p. 1992. FR 37(2)

[Dep. Anim. Sci., Univ. Calif., Davis 95616-8521] *Oncorhynchus mykiss.* Individual papers indexed in this issue of *Fisheries Review.*

TROUT AND SALMON CULTURE (Continued)

92-002079 Gouveia, Antonio J. R. THE STATE OF RAINBOW TROUT CULTURE IN PORTUGAL. *Aquaculture* 100(1-3):47-48. 1992. Abstract only. FR 37(2)

[Inst. Zool., Fac. Cienc., 4000 Porto, Portugal] *Oncorhynchus mykiss.*

92-002080 Grass, Alan F. NOYO RIVER EGG COLLECTING STATION, 1988-89. *Calif. Dep. Fish Game Inland Fish. Admin. Rep.* No. 91-13. 4p. 1991. FR 37(2)

Oncorhynchus kisutch in California.

92-002081 Hansen, Tom. THE POTENTIAL AND CONSTRAINTS OF THE NORWEGIAN SALMON AQUACULTURE PRODUCTION. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 1-8. 1991. FR 37(2)

[Fish. Dir., Inst. Mar. Res., Matre Aquacult. Stn., N-5198 Matredal, Norway]

92-002082 Heath, Ralph G. THE EFFECTS OF CAGE CULTURE OF RAINBOW TROUT IN SOUTH AFRICA ON THE WATER QUALITY OF THREE SHALLOW IMPOUNDMENTS WITH LONG RETENTION TIMES. *Aquaculture* 100(1-3):171. 1992. Abstract only. FR 37(2)

[Watertek, CSIR, Pretoria, South Africa] *Oncorhynchus mykiss.*

92-002083 Igler, Kurt. [WHY AUSTRIAN TROUT HATCHERIES DO NOT PRODUCE ALL OF THE EGGS THEY NEED FOR THEIR OWN OPERATION.] *Oesterreichs Fischerei* 44(7):169-171. 1991. In German. FR 37(2)

[Niederschockl, A-8044 Graz, Mariatrost, Austria] *Salmo trutta.*

92-002084 Jungalwalla, P. J. THE DEVELOPMENT OF AN INTEGRATED SALTWATER SALMONID FARMING INDUSTRY IN TASMANIA, AUSTRALIA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 65-73. 1991. In English with French summ. FR 37(2)

[Salmon Enterprises Tasmania, Wayatinah, Tasm. 7140, Australia] *Salmo salar* and *Oncorhynchus mykiss.*

92-002085 Kabus, M. J.; M. T. Collins; M. S. Brownfield; C. H. Amundson; T. B. Kayes and J. A. Malison. EFFECTS OF REARING DENSITY ON THE STRESS RESPONSE AND GROWTH OF RAINBOW TROUT. *J. Aquat. Anim. Health* 4(1):1-6. 1992. FR 37(2)

[School Vet. Sci., Univ. Wis., Madison 53706] *Oncorhynchus mykiss.*

92-002086 Kindschi, Greg A.; Charlie E. Smith and Robert F. Koby, Jr. PERFORMANCE OF TWO STRAINS OF RAINBOW TROUT REARED AT FOUR DENSITIES WITH SUPPLEMENTAL OXYGEN. *Prog. Fish-Cult.* 53(4):203-209. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Bozeman Fish Technol. Cent., 4050 Bridger Canyon Rd., Bozeman, MT 59715] *Oncorhynchus mykiss.*

92-002087 Kindschi, Greg A.; Charlie E. Smith and Robert F. Koby, Jr. OXYGEN CONSUMPTION OF TWO STRAINS OF RAINBOW TROUT REARED AT FOUR DENSITIES WITH SUPPLEMENTAL OXYGEN. *Prog. Fish-Cult.* 53(4):210-215. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Bozeman Fish Technol. Cent., 4050 Bridger Canyon Rd., Bozeman, MT 59715] *Oncorhynchus mykiss.*

92-002088 Logan, Samuel H. and Warren E. Johnston. ECONOMICS OF COMMERCIAL TROUT PRODUCTION. *Aquaculture* 100(1-3):25-46. 1992. FR 37(2)

[Dep. Agric. Econ., Univ. Calif., Davis 95616]

92-002089 McFeeters, Brian D. A REVIEW OF WORLD SALMON CULTURE. *Mar. Fish. Rev.* 53(1):27-40. 1991. FR 37(2)

[Off. Int. Affairs, NMFS, NOAA, Silver Spring, MD 20910] *Salmo salar, Salvelinus alpinus, Oncorhynchus kisutch, O. tshawytscha, O. masou, O. nerka,* and *O. keta.*

92-002090 McKay, Laura R.; Ian McMillan; Sherry E. Sadler and Richard D. Moccia. EFFECTS OF MATING SYSTEM ON INBREEDING LEVELS AND SELECTION RESPONSE IN SALMONID AQUACULTURE. *Aquaculture* 100(1-3):100-101. 1992. Abstract only. FR 37(2)

[Anim. & Poultry Sci., Univ. Guelph, Guelph, ON, Canada]

92-002091 Munro, Alan L. S. THE DEVELOPMENT OF ATLANTIC SALMON FARMING IN SCOTLAND. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 9-20. 1991. In English with French summ. FR 37(2)

[DAFS Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8DB, Scotland] *Salmo salar.*

92-002092 Naevdal, Gunnar. BROODSTOCK DEVELOPMENT FOR NORWEGIAN SALMONID AQUACULTURE. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 93-106. 1991. In English with French summ. FR 37(2)

[Dep. Fish. Biol., Univ. Bergen, P.O. Box 1839, Nordnes, N-5024 Bergen, Norway]

TROUT AND SALMON CULTURE (Continued)

92-002093 Nelson, William R. and Jack Bodle. NINETY YEARS OF SALMON CULTURE AT LITTLE WHITE SALMON NATIONAL FISH HATCHERY. *U.S. Fish Wildl. Serv. Biol. Rep.* 90(17):22p. 1990. Available from U.S. Fish & Wildl. Serv., Publ. Unit, 1849 C St., N.W., Mail Stop 130, ARLSQ, Washington, DC 20240. FR 37(2)
[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent. Seattle, Columbia River Field Stn., Star Rd., Cook, WA 98605] *Oncorhynchus tshawytscha* and *O. kisutch.*

92-002094 Paaver, Tiit. RAINBOW TROUT STRAINS IN THE SOVIET UNION AND ESTONIA. *Aquaculture* 100(1-3):101. 1992. Abstract only. FR 37(2)
[Inst. Zool. & Bot., Acad. Sci. Estonia, Tartu, SU-202400, Estonia] *Oncorhynchus mykiss.*

92-002095 Papst, M. H.; T. A. Dick; A. N. Arnason and C. E. Engel. EFFECT OF REARING DENSITY ON THE EARLY GROWTH AND VARIATION IN GROWTH OF JUVENILE ARCTIC CHARR, *SALVELINUS ALPINUS* (L.). *Aquacult. Fish. Manage.* 23(1):41-47. 1992. FR 37(2)
[Freshwater Inst., Dep. Fish. & Oceans, Winnipeg, MB, Canada R3T 2N6]

92-002096 Pickering, A. D. RAINBOW TROUT HUSBANDRY: MANAGEMENT OF THE STRESS RESPONSE. *Aquaculture* 100(1-3):125-139. 1992. FR 37(2)
[Inst. Freshwater Ecol., Windermere Lab., Far Sawrey, Ambleside, Cumbria LA22 0LP, England] *Oncorhynchus mykiss.*

92-002097 Quaglino, G.; M. Anselmino; M. Boccignone; G. B. Palmegiano; P. Villani and I. Zoccarato. [INFLUENCE OF MEAL TIMING AND STARVATION ON GROWTH AND FISH QUALITY.] *Atti Soc. Ital. Sci. Vet.* Vol. 42. p. 573-575. 1988. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 435. 1988-1990. FR 37(2)
Dicentrarchus labrax.

92-002098 Ronnberg, Olof; Kaj Adjers, Curt Ruokolahti and Maria Bondestam. EFFECTS OF FISH FARMING ON GROWTH, EPIPHYTES AND NUTRIENT CONTENT OF *FUCUS VESICULOSUS* L. IN THE ALAND ARCHIPELAGO, NORTHERN BALTIC SEA. *Aquat. Bot.* 42(2):109-120. 1992. FR 37(2)
[Dep. Biol. & Huso Biol. Stn., Abo Akad. Univ., SF-20500 Abo, Finland] *Oncorhynchus mykiss* in Finland.

92-002099 Sadler, Sherry E.; Donald McLeod: Laura R. McKay and Richard D. Moccia. SELECTION FOR EARLY SPAWNING AND REPEATABILITY OF SPAWN DATE IN RAINBOW TROUT. *Aquaculture* 100(1-3):103. 1992. Abstract only. FR 37(2)
[Anim. & Poultry Sci., Univ. Guelph, Guelph, ON, Canada] *Oncorhynchus mykiss* in Canada.

92-002100 Saunders, Richard L. SALMONID MARICULTURE IN ATLANTIC CANADA AND MAINE, USA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 21-36. 1991. In English with French summ. FR 37(2)
[Aquacult. & Invertebr. Fish., Dep. Fish. & Oceans, Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

92-002101 Shaw, Susan and Mark Gabbott. THE DEVELOPMENT OF TROUT MARKETS AND MARKETING WITH PARTICULAR REFERENCE TO THE EUROPEAN EXPERIENCE. *Aquaculture* 100(1-3):11-24. 1992. FR 37(2)
[Dep. Marketing, Univ. Strathclyde, Stenhouse Bldg., Cathedral St., Glasgow G4, Scotland]

92-002102 Skilbrei, Ove T. IMPORTANCE OF THRESHOLD LENGTH AND PHOTOPERIOD FOR THE DEVELOPMENT OF BIMODAL LENGTH-FREQUENCY DISTRIBUTION IN ATLANTIC SALMON (*SALMO SALAR*). *Can. J. Fish. Aquat. Sci.* 48(11):2163-2172. 1991. In English with French summ. FR 37(2)
[Aquacult. Cent., Inst. Mar. Res., P.O. Box 1870, N-5024 Bergen-Nordnes, Norway]

92-002103 Spence, J. A.; D. Eagan and M. Evans. THE PRESENT STATUS AND FUTURE PROSPECTS OF SALMON FARMING IN BRITISH COLUMBIA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 37-50. 1991. In English with French summ. FR 37(2)
[Hardy Seafarms Inc., Vancouver, BC, Canada] *Salmo salar, Oncorhynchus mykiss, O. kisutch,* and *O. tshawytscha.*

92-002104 Stefansson, Sigurd O.; Bjorn Th. Bjornsson; Tom Hansen; Carl Haux; G. Lasse Taranger and Richard L. Saunders. GROWTH, PARR-SMOLT TRANSFORMATION, AND CHANGES IN GROWTH HORMONE OF ATLANTIC SALMON (*SALMO SALAR*) REARED UNDER DIFFERENT PHOTOPERIODS. *Can. J. Fish. Aquat. Sci.* 48(11):2100-2108. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Mar. Biol., Univ. Bergen, High Technol. Cent., N-5020 Bergen, Norway]

92-002105 Steffens, Werner. LARGE-SCALE PRODUCTION OF RAINBOW TROUT IN OPEN RECIRCULATION SYSTEMS. *Aquaculture* 100(1-3):173. 1992. Abstract only. FR 37(2)
[Inst. Inland Fish., Berlin-Friedrichshagen, Germany] *Oncorhynchus mykiss.*

92-002106 Subandar, A. and Royann Petrell. RELATIONSHIP BETWEEN NUTRIENT LOADING FROM SALMON CULTURE AND THE GROWTH OF KELP (*LAMINARIA* SP.). *J. World Aquacult. Soc.* 22(3):57A. 1991. Abstract only. FR 37(2)
[Univ. British Columbia, Dep. Bio-Resour. Eng., 2357 Main Hall, Vancouver BC, Canada V4T 1W5]

TROUT AND SALMON CULTURE (Continued)

92-002107 Theocharis, V. S. TRADITIONAL RAINBOW TROUT CULTURE AND FISH FARMING MANAGEMENT AT LOUROS RIVER, GREECE. *Aquaculture* 100(1-3):174. 1992. Abstract only. FR 37(2)
[Natl. Hatchery Louros, Hani Terovou, Ioannina, Greece] *Oncorhynchus mykiss.*

92-002108 Timmons, Michael B. and William D. Youngs. DESIGN CONSIDERATIONS FOR RACEWAY CULTURE SYSTEMS. *J. World Aquacult. Soc.* 22(3):59A. 1991. Abstract only. FR 37(2)
[Dep. Agric. & Biol. Eng., Cornell Univ., Ithaca, NY 14853]

92-002109 Tolonnikov, G. Yu. FEATURES OF GROWTH OF STEELHEAD TROUT UNDER THE CONDITIONS OF EGORLYTSKIY FISHERY. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):157-160. 1991. FR 37(2)
Oncorhynchus mykiss.

92-002110 Zamorano, Ricardo Mendez. SALMON FARMING IN CHILE. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 51-63. 1991. FR 37(2)
Oncorhynchus kisutch.

WARMWATER CULTURE

92-002111 Avault, James W., Jr. FUTURE OUTLOOK FOR THE CATFISH INDUSTRY VISIONARY RESEARCH NEEDED. *Aquacult. Mag.* 18(2):69-71. 1992. FR 37(2)
[Agric. Cent., La. State Univ., Baton Rouge] *Ictalurus punctatus.*

92-002112 Balasubramanian, S.; M. R. Rajan and S. P. Raj. MICROBIOLOGY OF FISH GROWN IN A SEWAGE-FED POND. *Bioresour. Technol.* 40(1):63-66. 1992. FR 37(2)
[School Energy, Environ. & Nat. Resour., Madurai Kamaraj Univ., Madurai-625 021, India] *Tilapia mossambica, Catla catla, Cyprinus carpio cummunis, Hypophthalmichthys molitrix, Labeo rohita,* and *Cirrhinus mrigala.*

92-002113 Davis, Scott A.; Thomas E. Schwedler; Joseph R. Tomasso and John A. Collier. PRODUCTION CHARACTERISTICS OF PAN-SIZE CHANNEL CATFISH IN CAGES AND OPEN PONDS. *J. World Aquacult. Soc.* 22(3):183-186. 1991. FR 37(2)
[Tomasso: Dep. Aquacult., Fish. & Wildl., Clemson Univ., Clemson, SC 29634] *Ictalurus punctatus.*

92-002114 Doudet, Thierry. BRACKISHWATER TOLERANCE OF SOME SPECIES AND HYBRIDS OF *OREOCHROMIS* FOR USE IN LAGOON AQUACULTURE (IVORY COAST). *Aquaculture* 102(3):275-288. 1992. FR 37(2)
[Cent. Technique For. Trop., Dep. Cent. Coop. Int. Rech. Agron. Dev. (CTFT/CIRAD), 45 bis ave. Belle Gabrielle, 94736 Nogent-sur-Marne Cedex, France] *Tilapia aurea, T. mossambica, T. hornorum, T. nilotica* and their hybrids.

92-002115 Earnheart, Robert Winston. PLANKTONIC CYANOBACTERIA MANIPULATION THROUGH INCREASE OF NITROGEN TO PHOSPHORUS RATIOS IN COMMERCIAL CATFISH (*ICTALURUS PUNCTATUS*) PONDS. *Ph.D. dissertation, Univ. Miss.* 135p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4582. 1992. Order No. DA9207163. FR 37(2)

92-002116 Forsberg, James A. and Robert C. Summerfelt. EFFECT OF TEMPERATURE ON DIEL AMMONIA EXCRETION OF FINGERLING WALLEYE. *Aquaculture* 102(1/2):115-126. 1992. FR 37(2)
[Dep. Anim. Ecol., Iowa State Univ., Ames 50011] *Stizostedion vitreum vitreum.*

92-002117 Govind, B. V.; S. Ayyappan; S. L. Raghavan and M. F. Rahman. CULTURE OF CATLA *(CATLA CATLA)* IN FLOATING NET CAGES. *Mysore J. Agric. Sci.* 22(4):517-522. 1988. FR 37(2)
[Cent. Inland Fish. Res. Cent., Bangalore-560 003, India]

92-002118 Hochleithner, Martin. [REDISCOVERY OF STURGEONS AS COMMERCIAL FISHES.] *Oesterreichs Fischerei* 44(7):164-169. 1991. In German. FR 37(2)
[Fischereimeister, A-6370 Kitzbuhel, Austria] Data for 10 species.

92-002119 Jamu, Daniel M. THE CULTURE OF INDIGENOUS TILAPIA IN LOW ALKALINITY AREAS IN MALAWI, AFRICA. *J. World Aquacult. Soc.* 22(3):31A. 1991. Abstract only. FR 37(2)
[ICLARM/GTZ Africa Aquacult. Proj., P.O. Box 229, Zomba, Malawi] *Tilapia rendalli* and *T. shirana.*

92-002120 Jenkins, Wallace E.; Theodore I. J. Smith and Dawn E. Alessi. COMMERCIAL PRODUCTION RESULTS FOR SOUTH CAROLINA'S FIRST HYBRID STRIPED BASS CROP. *J. World Aquacult. Soc.* 22(3):31A. 1991. Abstract only. FR 37(2)
[Wildl. & Mar. Resour. Dep., Charleston, SC 29412] *Morone saxatilis.*

92-002121 Johnson, Steven R. and Isaac J. Schlosser. EFFECTS OF ORGANIC ENRICHMENT ON ZOOPLANKTON ABUNDANCE AND WALLEYE FRY GROWTH AND SURVIVAL IN ARTIFICIAL REARING PONDS. *J. Freshwater Ecol.* 6(3):315-321. 1991. FR 37(2)
[Schlosser: U.S. For. Serv., Redwood Sci. Lab., 1700 Bayview Dr., Arcata, CA 95521] *Stizostedion vitreum vitreum* in North Dakota.

WARMWATER CULTURE (Continued)

92-002122 Kaya, Calvin M. LABORATORY SPAWNING AND REARING OF SPECKLED DACE. *Prog. Fish-Cult.* 53(4):259-260. 1991. FR 37(2)

[Biol. Dep., Mont. State Univ., Bozeman 59717] *Rhinichthys osculus.*

92-002123 Knud-Hansen, C. F.; C. D. McNabb and T. R. Batterson. APPLICATION OF LIMNOLOGY FOR EFFICIENT NUTRIENT UTILIZATION IN TROPICAL POND AQUACULTURE. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2541-2543. 1989. FR 37(2)

[Asian Inst. Technol., Agric. & Food Eng., G.P.O. Box 2754, Bangkok 10501, Thailand] *Tilapia nilotica.*

92-002124 Lorio, Wendell J. and Peter W. Perschbacher. THE EFFECT OF RECIRCULATION, BIOLOGICAL FILTRATION, AND INJECTED OXYGEN ON CATFISH PRODUCTION IN SMALL PONDS. *J. World Aquacult. Soc.* 22(3):37A. 1991. Abstract only. FR 37(2)

[U.S. Dep. Agric., Agric. Res. Serv., Tishomingo, OK 73460] *Ictalurus punctatus.*

92-002125 Malison, Jeffrey A.; James A. Held and Clyde H. Amundson. FACTORS AFFECTING THE HABITUATION OF POND-REARED YELLOW PERCH (*PERCA FLAVESCENS*), WALLEYE (*STIZOSTEDION VITREUM*), AND WALLEYE-SAUGER HYBRIDS (*S. VITREUM* FEMALE X *S. CANADENSE* MALE) TO INTENSIVE CULTURE CONDITIONS. *J. World Aquacult. Soc.* 22(3):38A. 1991. Abstract only. FR 37(2)

[Aquacult. Program, Univ. Wis., Madison 53706]

92-002126 Martin-Robichaud, D. J.; R. H. Peterson and L. Crim. STRIPED BASS (*MORONE SAXATILIS*) RESEARCH AT THE BIOLOGICAL STATION, DFO, ST. ANDREWS, N.B. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 41-47. 1991. FR 37(2)

[Dep. Fish. & Oceans, Aquacult. & Invertebr. Fish. Div., Scotia Fundy Reg., Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

92-002127 Mason, E. STRIPED BASS CULTURE ON PRINCE EDWARD ISLAND? *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 65-66. 1991. FR 37(2)

[Dep. Fish. & Aquacult., P.O. Box 2000, Charlottetown, PI, Canada C1A 7N8]

92-002128 McGinty, Andrew S. TILAPIA PRODUCTION IN CAGES: EFFECTS OF CAGE SIZE AND NUMBER OF NONCAGED FISH. *Prog. Fish-Cult.* 53(4):246-249. 1991. FR 37(2)

[Nature's Catch, P.O. Box 1105, Louisville, KY 40201] *Tilapia nilotica.*

92-002129 McNabb, C. D.; C. F. Knud-Hansen; T. R. Batterson and K. Jaiyen. A SYSTEMATIC APPROACH TO MAXIMIZING NUTRIENT EFFICIENCY AND GROWTH OF NILE TILAPIA (*OREOCHROMIS NILOTICUS*) UNDER SEMI-INTENSIVE POND CULTURE. *J. World Aquacult. Soc.* 22(3):40A. 1991. Abstract only. FR 37(2)

[Dep. Fish. & Wildl., Mich. State Univ., East Lansing]

92-002130 Molnar, Joseph J.; Alphonse Rubagumya and Vewonyi Adjavon. THE SUSTAINABILITY OF AQUACULTURE AS A FARM ENTERPRISE IN RWANDA. *J. Appl. Aquacult.* 1(2):37-62. 1991. FR 37(2)

[Int. Cent. Aquacult., Agric. Exp. Stn., Dep. Agric. Econ. & Rural Sociol., Auburn Univ., Auburn, AL 36849-5406] *Tilapia nilotica.*

92-002131 Nandeesha, M. C.; P. Keshavanath; T. J. Varghese; H. P. C. Shetty and I. Karunasagar. UTILIZATION OF SEWAGE FOR CARP CULTURE. *Mysore J. Agric. Sci.* 22(1):102-108. 1988. FR 37(2)

[Coll. Fish., Mangalore-575 002, India] *Hypophthalmichthys molitrix.*

92-002132 Nunley, Chad E. PRODUCTION OF HYBRID STRIPED BASS (*MORONE CHRYSOPS* x *MORONE SAXATILIS*) IN A RECIRCULATING AQUACULTURE SYSTEM. *M.S. thesis, Va. Polytech. Inst. & State Univ.* 193p. 1992. FR 37(2)

92-002133 Pal, Debashis and Chanchal Das Gupta. MICROBIAL POLLUTION IN WATER AND ITS EFFECT ON FISH. *J. Aquat. Anim. Health* 4(1):32-39. 1992. FR 37(2)

[Das Gupta: Dep. Biophysics, Mol. Biol. & Genet., Calcutta Univ., 92 Acharyya Prafulla Chandra Rd., Calcutta-700 009, India] *Ophicephalus punctatus, Hypophthalmichthys molitrix,* and *Cirrhinus mrigala.*

92-002134 Phillips, Peter C. and Christopher C. Kohler. ESTABLISHMENT OF TILAPIA SPAWNING FAMILIES PROVIDING A CONTINUOUS SUPPLY OF EGGS FOR *IN VITRO* FERTILIZATION. *J. World Aquacult. Soc.* 22(4):217-223. 1991. FR 37(2)

[Kohler: Fish. Res. Lab. & Dep. Zool., South. Ill. Univ., Carbondale 62901-6511] *Tilapia nilotica* x *T. mossambica.*

92-002135 Poltronieri Pacheco, Tania Denise and Eliana Pinheiro de Carvalho. EFFECT OF FEED AND STORAGE TIME ON MICROBIOLOGICAL FLORA OF TILAPIA (*OREOCHROMIS NILOTICUS*). *Cienc. Prat.* 14(3):272-282. 1990. In Portuguese with English summ. FR 37(2)

[Univ. Fed. Espirito Santo, Vitoria, ES, Brazil]

WARMWATER CULTURE (Continued)

92-002136 Ramboux, Anne C. R. and Rex A. Dunham. EVALUATION OF FOUR GENETIC GROUPS OF CHANNEL-BLUE CATFISH HYBRIDS GROWN IN EARTHEN PONDS. *J. World Aquacult. Soc.* 22(3):49A. 1991. Abstract only. FR 37(2)

[Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849] *Ictalurus furcatus* and *I. punctatus.*

92-002137 Ray, Arun Kumar and Isita Das. UTILIZATION OF DIETS CONTAINING COMPOSTED AQUATIC WEED (*SALVINIA CUCULATA*) BY THE INDIAN MAJOR CARP, ROHU (*LABEO ROHITA* HAM.), FINGERLINGS. *Bioresour. Technol.* 40(1):67-72. 1992. FR 37(2)

[Fish. Lab., Dep. Zool., Visva-Bharati Univ., Santiniketan-731 235, West Bengal, India]

92-002138 Rosler, Hans-Jurgen. SOUTH AMERICAN KILLIES IN THE GARDEN POND. *Trop. Fish Hobbyist* 40(5):98-104. 1992. FR 37(2)

Cynolebias and *Pterolebias.*

92-002139 Rout, M. and M. A. V. Lakshmanan. A STATISTICAL ANALYSIS ON THE GROWTH PATTERN OF CARPS DURING THE FIRST AND SECOND YEAR OF REARING IN COMPOSITE CARP CULTURE. *Mysore J. Agric. Sci.* 24(1):102-106. 1990. FR 37(2)

[Cent. Inst. Freshwater Aquacult., Kausalyaganga, Bhubaneswar-751 002, India] *Catla catla, Cirrhinus mrigala, Labeo rohita, Cyprinus carpio, Hypophthalmichthys molitrix,* and *Ctenopharyngodon idella.*

92-002140 Sarkar, S. K. EFFECTS OF TEMPERATURE ON EGGS, FRY, AND FINGERLINGS OF ROHU (*LABEO ROHITA*) EXPOSED TO UREA. *Prog. Fish-Cult.* 53(4):242-245. 1991. FR 37(2)

[Dep. Zool., Netaji Nagar Day Coll., Regent Park, Calcutta-700 040, India]

92-002141 Schlott-Idl, Karin. DEVELOPMENT OF ZOOPLANKTON IN FISHPONDS OF THE WALDVIERTEL (LOWER AUSTRIA). *J. Appl. Ichthyol.* 7(4):223-229. 1991. In English with German and French summ. FR 37(2)

[Oekol. Stn. Waldviertel, Gebharts 54, A-3943 Schrems, Austria] *Coregonus lavaretus* and *Cyprinus carpio.*

92-002142 Smeltzer, John F. and Stephen A. Flickinger. CULTURE, HANDLING, AND FEEDING TECHNIQUES FOR BLACK CRAPPIE FINGERLINGS. *N. Am. J. Fish. Manage.* 11(4):485-491. 1991. FR 37(2)

[Div. Wildl., 6060 Broadway, Denver, CO 80216] *Pomoxis nigromaculatus.*

92-002143 Snir, Israel; Gabriel Bernat; Ofer Zusmanovith; Yacob Goldberg and Eli Tisona. INTENSIVE CULTIVATION OF RED TILAPIA IN "COLD" WATER AND HIGH ELEVATION IN THE TROPICS. *J. World Aquacult. Soc.* 22(3):55A. 1991. Abstract only. FR 37(2)

[Colapia S.A. Callie 38N No. 5N-27, Cali, Colombia] *Tilapia urolepis* x *T. mossambica.*

92-002144 Sumagaysay, Neila S. UTILIZATION OF FEED AND RICE STRAW COMPOST FOR MILKFISH, *CHANOS CHANOS,* PRODUCTION IN BRACKISHWATER PONDS. *J. Appl. Ichthyol.* 7(4):230-237. 1991. In English with German and French summ. FR 37(2)

[Aquacult. Dep., SEAFDEC, P.O. Box 256, Iloilo City, Philippines 5000]

92-002145 Szyper, James P. PRIMARY PRODUCTION IN FERTILIZED TROPICAL EARTHEN PONDS ESTIMATED AT FREQUENT INTERVALS BY OXYGEN PRODUCTION AND CARBON REMOVAL. *J. World Aquacult. Soc.* 22(3):57A-58A. 1991. Abstract only. FR 37(2)

[Inst. Mar. Biol., Univ. Hawaii, Kaneohe 96744]

92-002146 Tave, Douglas. A SIMPLE SELECTIVE BREEDING PROGRAM FOR CATFISH FARMERS. *Aquacult. Mag.* 18(2):77-80. 1992. FR 37(2)

[Dep. Agric., Univ. Arkansas, Pine Bluff 71601] *Ictalurus punctatus.*

92-002147 Teichert-Coddington, David and Bartholomew Green. DETERMINATION OF NIGHTTIME OXYGEN RESPIRATION FOR FISH CULTURE PONDS IN HONDURAS: EFFECTS OF MEASUREMENT METHODOLOGY. *J. World Aquacult. Soc.* 22(3):58A. 1991. Abstract only. FR 37(2)

[Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849-5419] *Tilapia nilotica.*

92-002148 Victor, Reginald and Benedicta O. Akpocha. THE BIOLOGY OF SNAKEHEAD, *CHANNA OBSCURA* (GUNTHER), IN A NIGERIAN POND UNDER MONOCULTURE. *Aquaculture* 101(1/2):17-24. 1992. FR 37(2)

[Dep. Biol. Sultan Qaboos Univ., Al Khod, Oman]

92-002149 Watanabe, Wade O.; William D. Head; Sarah Jane Smith and Karl W. Mueller. RECENT PROGRESS IN COMMERCIAL-SCALE, BRACKISHWATER PRODUCTION OF FLORIDA RED TILAPIA FRY. *J. World Aquacult. Soc.* 22(3):63A. 1991. Abstract only. FR 37(2)

[Caribbean Mar. Res. Cent., 100 E. 17th St., Riviera Beach, FL] *Tilapia mossambica* x *T. urolepis.*

WARMWATER CULTURE (Continued)

92-002150 Watanabe, Wade O.; Sarah J. Smith; Robert I. Wicklund and Bori L. Olla. HATCHERY PRODUCTION OF FLORIDA RED TILAPIA SEED IN BRACKISHWATER TANKS UNDER NATURAL-MOUTHBROODING AND CLUTCH-REMOVAL METHODS. *Aquaculture* 102(1/2):77-88. 1992. FR 37(2)

[Caribbean Mar. Res. Cent., 805 E. 46th Pl., Vero Beach, FL 32963] *Tilapia hornorum* x *T. mossambica.*

MARICULTURE

92-002151 Belkovskiy, N. M.; Yu. V. Lega and A. G. Chernitskiy. DISRUPTION OF WATER-SALT METABOLISM IN RAINBOW TROUT, *SALMO GAIRDNERI*, IN SEAWATER AT LOW TEMPERATURES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):134-141. 1991. FR 37(2)

[Murmansk Mar. Biol. Inst., Kol'skiy Sci. Cent., USSR Acad. Sci., Dal'niye Zelentsy, USSR] *Oncorhynchus mykiss.*

92-002152 Cho, Yong Chul and Sang Geun Yang. [STUDY ON THE EARLY SPAWNING INDUCEMENT OF BASTARD HALIBUT, *PARALICHTHYS OLIVACEUS.*] *Bull. Natl. Fish. Res. Dev. Agency* No. 45. p. 183-196. 1991. In Korean. From Korean Sci. Abstr. 23(6):2331. 1991. FR 37(2)

92-002153 Dushkina, Ladda A. CULTIVATION OF RAINBOW TROUT IN MARINE AREAS OF THE USSR. *Aquaculture* 100(1-3):47. 1992. Abstract only. FR 37(2)

[Inst. Mar. Fish. Oceanogr., V. Krasnoselskaya, Moscow 107140, USSR] *Oncorhynchus mykiss* in the USSR.

92-002154 Goreau, S. and T. J. Goreau. FISH MARICULTURE POTENTIAL OF JAMAICAN BACK-REEF SPRINGS. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 35. 1988. English and Spanish abstract only. FR 37(2)

[Univ. Wash., Seattle]

92-002155 Goyard, Emmanuel; Patrick Soletchnik and Emmanuel Thouard. MAIN RESULTS ON INTENSIVE AQUACULTURE OF RED DRUM (*SCIAENOPS OCELLATA*) IN MARTINIQUE (F.W.I.). *J. World Aquacult. Soc.* 22(3):27A. 1991. Abstract only. FR 37(2)

[IFREMER, GIE RA. 97231 Robert Martinique, Windward Islands]

92-002156 Kikuchi, Kohtaroh; Shigenobu Takeda; Haruo Honda and Michiyasu Kiyono. EFFECT OF FEEDING ON NITROGEN EXCRETION OF JAPANESE FLOUNDER *PARALICHTHYS OLIVACEUS. Nippon Suisan Gakkaishi* 57(11):2059-2064. 1991. In English with Japanese summ. FR 37(2)

[Abiko Res. Lab., Cent. Res. Inst. Electric Power Ind., Abiko, Chiba 270-11, Japan]

92-002157 Kikuchi, Kohtaroh; Haruo Honda and Michiyasu Kiyono. EFFECT OF FEEDING ON NITROGENOUS EXCRETION OF JAPANESE FLOUNDER, *PARALICHTHYS OLIVACEUS. J. World Aquacult. Soc.* 22(3):33A. 1991. Abstract only. FR 37(2)

[Cent. Res. Inst. Electric Power Ind., Abiko, Chiba, Japan]

92-002158 Kim, Bong; Anthony C. Ostrowski and Charles Brownell. THE EFFECT OF STOCKING DENSITY ON SURVIVAL AND AGGRESSIVE BEHAVIOR IN JUVENILE DOLPHIN, *CORYPHAENA HIPPURUS. J. World Aquacult. Soc.* 22(3):33A. 1991. Abstract only. FR 37(2)

[Oceanic Inst., Makapuu Point, P.O. Box 25280, Honolulu, HI 96825]

92-002159 Lockwood, S. J. THE ECOLOGY AND MANAGEMENT ASPECTS OF EXTENSIVE MARICULTURE. *ICES Mar. Sci. Symp.* 192:248p. 1991. From Deep-Sea Res. Part B Oceanogr. Lit. Rev. 39(2):1046. 1992. FR 37(2)

92-002160 Middaugh, D. P.; B. S. Anderson and M. J. Hemmer. LABORATORY SPAWNING OF TOPSMELT, *ATHERINOPS AFFINIS*, WITH NOTES ON CULTURE AND GROWTH OF LARVAE. *Environ. Toxicol. Chem.* 11(3):393-399. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Gulf Breeze Environ. Res. Lab., Sabine Island, Gulf Breeze, FL 32561]

92-002161 Ruohonen, Kari and Timo Makinen. POTENTIAL WAYS TO DIMINISH THE ENVIRONMENTAL IMPACT OF MARICULTURE ON THE BALTIC SEA. *Finn. Fish. Res.* Vol. 12. p. 91-100. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Evo State Fish. & Aquacult. Res. Stn., SF-16970 Evo, Finland]

92-002162 Santos, B. H.; C. L. Brown and C. J. Kittel. THE MARICULTURE RESEARCH AND TRAINING CENTER. *J. World Aquacult. Soc.* 22(3):53A. 1991. Abstract only. FR 37(2)

[Maricult. Res. & Training Cent., Inst. Mar. Biol., Univ. Hawaii, Kaneohe 96744]

92-002163 Tamaru, Clyde S.; Aaron Moriwake; Chris D. Kelley; Cheng-Sheng Lee and Tawfik I. El Kazzaz. REPORT OF THE FIRST INDUCED SPAWNING OF *MUGIL CEPHALUS* IN EGYPT. *J. World Aquacult. Soc.* 22(3):58A. 1991. Abstract only. FR 37(2)

[Oceanic Inst., Honolulu, HI 96825]

MARICULTURE (Continued)

92-002164 Thacker, S. G.; W. Griffin; A. Rahman and J. Lambregts. MODELING THE FINANCIAL RISK OF INTENSIVE REDFISH, *SCIAENOPS OCELLATUS*, AQUACULTURE IN TEXAS. *J. World Aquacult. Soc.* 22(3):58A. 1991. Abstract only. FR 37(2)
[Dep. Agric. Econ., Agric. Exp. Stn., College Station, TX 77843]

92-002165 Tucker, John W., Jr. INDUCED SPAWNING AND CULTURE OF NASSAU GROUPERS, *EPINEPHELUS STRIATUS*. *J. World Aquacult. Soc.* 22(3):60A. 1991. Abstract only. FR 37(2)
[Harbor Branch, Oceanogr. Inst., 5600 Old Dixie Hwy., Fort Pierce, FL 34946]

92-002166 Tucker, John W., Jr.; J. Eugene Parsons; Gina C. Ebanks and Phillippe G. Bush. INDUCED SPAWNING OF NASSAU GROUPER *EPINEPHELUS STRIATUS*. *J. World Aquacult. Soc.* 22(3):187-191. 1991. FR 37(2)
[Harbor Branch Oceanogr. Inst., 5600 Old Dixie Hwy., Fort Pierce, FL 34946]

FEEDS, FEEDING, AND NUTRITION

92-002167 Ahmad, Abu Talib; Shigehisa Yamasaki and Hachiro Hirata. OPTIMUM FEEDING RATE OF THE ROTIFER *BRACHIONUS PLICATILIS* ON THE MARINE ALGA *NANNOCHLOROPSIS* SP. *J. World Aquacult. Soc.* 22(4):230-234. 1991. FR37(2)
[Yamasaki: Fac. Fish., Kagoshima Univ., Kagoshima 890, Japan]

92-002168 Akiyama, Dean M. THE USE OF SOYBEAN MEAL BASED FEEDS FOR HIGH DENSITY CAGE CULTURE OF COMMON CARP IN INDONESIA AND THE PEOPLE'S REPUBLIC OF CHINA. *J. World Aquacult. Soc.* 22(3):12A. 1991. Abstract only. FR 37(2)
[Am. Soybean Assoc., Singapore 0923] *Cyprinus carpio.*

92-002169 Alanara, Anders. DEMAND-FEEDING AS A SELF-REGULATING FEEDING SYSTEM FOR RAINBOW TROUT IN NET PENS. *Aquaculture* 100(1-3):167. 1992. Abstract only. FR 37(2)
[Swedish Univ. Agric. Sci., Dep. Aquacult., Box 1457, Umea S-901 24, Sweden] *Oncorhynchus mykiss* in Sweden.

92-002170 Amesen, Petter and Ashild Krogdahl. OATS AS FEED FOR RAINBOW TROUT: EFFECTS ON GROWTH AND DIGESTIBILITY OF NUTRIENTS. *Aquaculture* 100(1-3):231. 1992. Abstract only. FR 37(2)
[AKVAFORSK, P.O. Box 10, N-1432, As-NLH, Norway] *Oncorhynchus mykiss.*

92-002171 Arumugam, Phillip T. *PUNTIUS GONIONOTUS* FRY - PLANKTON INTERACTIONS IN THE BPC HATCHERY TANK SYSTEM, UPM, MALAYSIA. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2544-2546. 1989. FR 37(2)
[Cent. Appl. Sci., Univ. Agric., Bintulu Campus, P.O. Box 396, 97008 Bintulu, Sarawak, Malaysia]

92-002172 Barbi, Josef W. ADVANCED TECHNOLOGIES AND ECONOMICAL CONSIDERATIONS FOR PROCESSING AND NUTRITION OF AVAILABLE INGREDIENTS AND EFFECTIVE FEEDS FOR AQUACULTURE. *J. World Aquacult. Soc.* 22(3):14A. 1991. Abstract only. FR 37(2)
[Asima Corp., Independence, KS 67301]

92-002173 Bengtson, David A.; Henry E. Leibovitz and Gustavo Bisbal. DIGESTION AND ABSORPTION OF LIVE VS. MICROENCAPSULATED *ARTEMIA* NAUPLII BY LARVAE OF STRIPED BASS (*MORONE SAXATILIS*) AND INLAND SILVERSIDES (*MENIDIA BERYLLINA*): A HISTOLOGICAL STUDY. *J. World Aquacult. Soc.* 22(3):15A. 1991. Abstract only. FR 37(2)
[Dep. Zool. & Food Sci. & Nutr., Univ. R.I., Kingston 02881]

92-002174 Borlongan, I. G. and M. M. Parazo. EFFECT OF DIETARY LIPID SOURCES ON GROWTH, SURVIVAL AND FATTY ACID COMPOSITION OF SEA BASS (*LATES CALCARIFER*, BLOCH) FRY. *Isr. J. Aquacult. Bamidgeh* 43(3):95-102. 1991. FR 37(2)
[Aquacult. Dep., SEAFDEC, P.O. Box 256, Iloilo City, Philippines]

92-002175 Bouguenec, V. OLIGOCHAETES (TUBIFICIDAE AND ENCHYTRAEIDAE) AS FOOD IN FISH REARING: A REVIEW AND PRELIMINARY TESTS. *Aquaculture* 102(3):201-217. 1992. FR 37(2)
[Inst. Aquapure, Pradines, 12160 Baraqueville, France] *Brachydanio rerio, Rutilus rutilus,* and *Perca fluviatilis.*

92-002176 Brown, Michael L.; Gholam R. Nematipour and Delbert M. Gatlin. DIETARY PROTEIN REQUIREMENT OF JUVENILE HYBRID STRIPED BASS AT DIFFERENT SALINITIES. *J. World Aquacult. Soc.* 22(3):17A. 1991. Abstract only. FR 37(2)
[Dep. Wildl. & Fish. Sci., Tex. A&M Univ. Syst., College Station 77843] *Morone saxatilis* and *M. chrysops.*

92-002177 Brown, Paul B.; Mark E. Griffin and M. R. White. EXPERIMENTAL DIET EVALUATIONS FOR HYBRID STRIPED BASS NUTRITIONAL RESEARCH. *J. World Aquacult. Soc.* 22(3):17A. 1991. Abstract only. FR 37(2)
[Dep. For. & Nat. Resour., Purdue Univ., West Lafayette, IN 47907] *Morone saxatilis.*

FEEDS, FEEDING, AND NUTRITION (Continued)

92-002178 Brune, David E. FED POND SYSTEMS. *J. World Aquacult. Soc.* 22(3):18A. 1991. Abstract only. FR 37(2)

[Dep. Agric. & Biol. Eng., Clemson Univ., Clemson, SC 29634-0357]

92-002179 Cho, C. Y. FEEDING SYSTEMS FOR RAINBOW TROUT AND OTHER SALMONIDS WITH REFERENCE TO CURRENT ESTIMATES OF ENERGY AND PROTEIN REQUIREMENTS. *Aquaculture* 100(1-3):107-123. 1992. FR 37(2)

[Fish Nutr. Lab., Ontario Minist. Nat. Resour & Dep. Nutr. Sci., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Oncorhynchus mykiss.*

92-002180 Cowey, C. B. NUTRITION: ESTIMATING REQUIREMENTS OF RAINBOW TROUT. *Aquaculture* 100(1-3):177-189. 1992. FR 37(2)

[Dep. Nutr. Sci., Univ. Guelph, ON, Canada N1G 2W1] *Oncorhynchus mykiss.*

92-002181 Duncan, Patricia L. and Richard T. Lovell. THE EFFECT OF FOLIC ACID ON GROWTH, SURVIVAL, AND HEMATOLOGY IN THE CHANNEL CATFISH, *ICTALURUS PUNCTATUS. J. World Aquacult. Soc.* 22(3):23A. 1991. Abstract only. FR 37(2)

[Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849]

92-002182 Fair, Patricia A.; Woodie P. Williams and Theodore I. J. Smith. INFLUENCE OF DIETARY n-3 FATTY ACIDS ON GROWTH, NUTRITIONAL AND POST-HARVEST QUALITY OF CULTURED HYBRID STRIPED BASS. *J. World Aquacult. Soc.* 22(3):24A. 1991. Abstract only. FR 37(2)

[NOAA, NMFS, Charleston, SC 29412] *Morone saxatilis.*

92-002183 Fermin, Armando C. and Maria Edna C. Bolivar. LARVAL REARING OF THE PHILIPPINE FRESHWATER CATFISH, *CLARIAS MACROCEPHALUS* (GUNTHER), FED LIVE ZOOPLANKTON AND ARTIFICIAL DIET: A PRELIMINARY STUDY. *Isr. J. Aquacult. Bamidgeh* 43(3):87-94. 1991. FR 37(2)

[Aquacult. Dep., SEAFDEC, Tigbauan, Iloilo 5021, Philippines]

92-002184 Gershanovich, A. D. and L. R. Taufik. EFFECT OF FOOD CONCENTRATION AND DENSITY ON THE JUVENILE ACIPENSERID RATION. *Dokl. Biol. Sci. (Engl. Transl. Dokl. Akad. Nauk SSSR)* 317(1-6):132-139. 1991. FR 37(2)

[All-Union Sci.-Res. Inst. Mar. Fish. & Oceanogr., Moscow, USSR] *Huso huso* and *Acipenser ruthenus.*

92-002185 Green, Bartholomew W. SUBSTITUTION OF ORGANIC MANURE FOR PELLETED FEED IN TILAPIA PRODUCTION. *Aquaculture* 101(3/4):213-222. 1992. FR 37(2)

[Dep. Fish. & Allied Aquacult., Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849-5419] *Tilapia nilotica.*

92-002186 Griffin, Mark E.; Paul B. Brown and Ladon Swann. DIETARY LYSINE REQUIREMENT OF JUVENILE HYBRID STRIPED BASS. *J. World Aquacult. Soc.* 22(3):27A-28A. 1991. Abstract only. FR 37(2)

[Dep. For. & Nat. Resour., Purdue Univ., West Lafayette, IN 47907] *Morone saxatilis.*

92-002187 Gunther, J.; N. Galvez-Hidalgo; J. Ulloa-Rojas and J. Coppoolse. THE EFFECT OF THE FEEDING LEVEL ON GROWTH AND SURVIVAL OF LARVAE OF *CICHLASOMA MANAGUENSE* IN THE PRIMARY NURSING PHASE. *J. World Aquacult. Soc.* 22(3):28A. 1991. Abstract only. FR 37(2)

[Escuela Cienc. Biol., Univ. Nac., Costa Rica]

92-002188 Hecht, Thomas and Anthony G. McEwan. CHANGE IN GROSS PROTEIN AND LIPID REQUIREMENTS OF RAINBOW TROUT AT ELEVATED TEMPERATURES. *Aquaculture* 100(1-3):231. 1992. Abstract only. FR 37(2)

[Dep. Ichthyol. & Fish. Sci., Rhodes Univ., Grahamstown, South Africa] *Oncorhynchus mykiss* in South Africa.

92-002189 Heinen, John M.; Joseph A. Hankins; Mark Subramanyam and Barnaby J. Watten. EVALUATION OF A LOW-POLLUTION TROUT DIET IN TANKS RECEIVING WATER SUPERSATURATED WITH DISSOLVED OXYGEN. *J. World Aquacult. Soc.* 22(3):29A. 1991. Abstract only. FR 37(2)

[Zeigler Bros. Inc., Spring & Ground Water Resour. Inst., P.O. Box 1746, Shepherdstown, WV 25443] *Oncorhynchus mykiss.*

92-002190 Kim, Kyu-Il; Terrence B. Kayes and Clyde H. Amundson. REQUIREMENTS FOR SULFUR AMINO ACIDS AND UTILIZATION OF D-METHIONINE BY RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquaculture* 101(1/2):95-103. 1992. FR 37(2)

[Dep. Anim. Sci., Cheju Natl. Univ., Cheju 690-756, South Korea]

92-002191 Klontz, George W.; Mark G. Maskill and Horst Kaiser. EFFECTS OF REDUCED CONTINUOUS VERSUS INTERMITTENT FEEDING OF STEELHEAD. *Prog. Fish-Cult.* 53(4):229-235. 1991. FR 37(2)

[Dep. Fish & Wildl. Resour., Univ. Idaho, Moscow 83843] *Oncorhynchus mykiss.*

FEEDS, FEEDING, AND NUTRITION (Continued)

92-002192 Konoval, G.; P. B. Brown; P. M. Rosenblum; K. B. Mayes and T. M. Brandt. MOISTURE AND FAT LEVELS IN REPRODUCTIVELY ACTIVE MALE AND FEMALE LARGEMOUTH BASS. *J. World Aquacult. Soc.* 22(3):33A-34A. 1991. Abstract only. FR 37(2)
[Purdue Univ., Dep. For. & Nat. Resour., West Lafayette, TN 47907] *Micropterus salmoides.*

92-002193 Korstad, John; Rafael Mangual; Richard Couch and Mitch Fram. PERFORMANCE OF HYBRID TILAPIA FED A COMMERCIAL RATION VS. ALGAE. *J. World Aquacult. Soc.* 22(3):34A. 1991. Abstract only. FR 37(2)
[Dep. Biol., Oral Roberts Univ., Tulsa, OK 74171] *Tilapia aurea* and *T. nilotica.*

92-002194 Lall, S. P. SALMONID NUTRITION AND FEED PRODUCTION. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 107-123. 1991. In English with French summ. FR 37(2)
[Biol. Sci. Branch, Dep. Fish. & Oceans, P.O. Box 550, Halifax, NS, Canada B3J 2S7] *Salmo salar* and *Oncorhynchus mykiss.*

92-002195 Leibovitz, Henry E.; David A. Bengtson and Kenneth L. Simpson. ALBUMEN-ALGINATE CAPSULES FOR DELIVERING FOOD TO LARVAL INLAND SILVERSIDES, *MENIDIA BERYLLINA*, AND STRIPED BASS, *MORONE SAXATILIS. J. World Aquacult. Soc.* 22(3):35A. 1991. Abstract only. FR 37(2)
[Dep. Food Sci. & Nutr., Univ. R.I., Kingston 02881]

92-002196 Li, Menghe and Richard T. Lovell. COMPARISON OF SATIATE FEEDING AND RESTRICTED FEEDING OF CHANNEL CATFISH WITH VARIOUS CONCENTRATIONS OF DIETARY PROTEIN IN PRODUCTION PONDS. *J. World Aquacult. Soc.* 22(3):36A. 1991. Abstract only. FR 37(2)
[Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849] *Ictalurus punctatus.*

92-002197 Lim, Chhorn; Brad Leamaster and James A. Brock. THIAMIN REQUIREMENT OF RED HYBRID TILAPIA GROWN IN SEAWATER. *J. World Aquacult. Soc.* 22(3):36A. 1991. Abstract only. FR 37(2)
[U.S. Dep. Agric.-ARS, Trop. Aquacult. Res. Unit, Oceanic Inst., Makapuu Point, P.O. Box 25280, Honolulu, HI 96825] *Tilapia mossambica* x *T. urolepis.*

92-002198 Maugle, Paul D.; Phyllis Brown; Zhen Yi and Katherine Hoffman. THE STABILITY OF ASCORBIC ACID, VITAMIN (C_1) AND DIPOTASSIUM-2-SULFATE H_2O, VITAMIN (C_2) IN EXTRUDED SALMONID FEEDS. *J. World Aquacult. Soc.* 22(3):38A-39A. 1991. Abstract only. FR 37(2)
[P.D.H. & Assoc., 88 Central Ave., Norwich, CT 06380]

92-002199 Moon, Hae Young; William H. Neill and Delbert M. Gatlin. EVALUATION OF PROTEIN SOURCES FOR RED DRUM (*SCIAENOPS OCELLATUS*) DIETS. *J. World Aquacult. Soc.* 22(3):42A-43A. 1991. Abstract only. FR 37(2)
[Dep. Wildl. & Fish. Sci., Tex. A&M Univ. Syst., College Station 77843]

92-002200 Motlokh, N. N.; O. L. Radishcheva and V. N. Radenko. VARIATION IN THE CYTOSTRUCTURE OF THE LIVER OF LARVAL BIGHEAD IN THE PROCESS OF GROWTH ON DIFFERENT DIETS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):80-90. 1991. FR 37(2)
[All-Union Res. Inst., Irrigation Fish Cult. (VNIIR), Moscow, Oblast, USSR] *Aristichthys nobilis.*

92-002201 Nagata, W. D. and J. N. C. Whyte. EFFECTS OF YEAST AND ALGAL DIETS ON THE GROWTH AND BIOCHEMICAL COMPOSITION OF THE ROTIFER *BRACHIONUS PLICATILIS* (MULLER) IN CULTURE. *Aquacult. Fish. Manage.* 23(1):13-21. 1992. FR 37(2)
[Whyte: Fish. & Oceans Canada, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002202 Navarro, J. C.; F. Amat and J. R. Sargent. FATTY ACID COMPOSITION OF COASTAL AND INLAND *ARTEMIA* SP. POPULATIONS FROM SPAIN. *Aquaculture* 102(3):219-230. 1992. FR 37(2)
[NERC Unit Aquat. Biochem., Stirling Univ., Stirling FK9 4LA, Scotland]

92-002203 Newton, Scott H.; Ephraim R. Seidman; Mark Subramanyam and Jeffrey L. Taylor. COMPARISON OF HYBRID STRIPED BASS FED THREE DIETS WITH DIFFERENT PROTEIN/FAT LEVELS. *J. World Aquacult. Soc.* 22(3):45A. 1991. Abstract only. FR 37(2)
[Va. State Univ., Petersburg 23803] *Morone saxatilis.*

92-002204 Olli, Jan J.; Ashild Krogdahl and Trygve Berg-Lea. PROCESSING OF SOYBEAN MEALS AFFECTS NUTRITIVE VALUE FOR RAINBOW TROUT. *Aquaculture* 100(1-3):234. 1992. Abstract only. FR 37(2)
[AKVAFORSK, P.O. Box 10, N-1432, As-NLH, Norway] *Oncorhynchus mykiss.*

92-002205 Ostrowski, Anthony C.; Chhorn Lim and Victor Graves. THE EFFECT OF DIETARY PROTEIN LEVEL AND LIPID TO CARBOHYDRATE RATIO ON GROWTH AND FEED UTILIZATION OF JUVENILE THREADFIN (*POLYDACTYLUS SEXIFILIS*) FED PRACTICAL DIETS. *J. World Aquacult. Soc.* 22(3):46A. 1991. Abstract only. FR 37(2)
[Oceanic Inst., Makapuu Point, P.O. Box 25280, Honolulu, HI 96825]

FEEDS, FEEDING, AND NUTRITION (Continued)

92-002206 Ostrowski, Anthony C.; Bong Kim and Eirik O. Duerr. THE EFFECT OF COMMERCIAL DIETS ON GROWTH AND FEED CONVERSION OF TWO CARNIVOROUS MARINE FINFISH: THE THREADFIN (*POLYDACTYLUS SEXIFILIS*) AND THE DOLPHIN (*CORYPHAENA HIPPURUS*). *J. World Aquacult. Soc.* 22(3):46A. 1991. Abstract only. FR 37(2)

[Oceanic Inst., Makapuu Point, P.O. Box 25280, Honolulu, HI 96825]

92-002207 Phillips, Peter C.; Arturo Russell; Judith A. Bender; Reynold Murray and Yupha Vatcharapijam. COMPARISON OF TILAPIA (*OREOCHROMIS NILOTICUS*) GROWTH FEEDING ON A CYANOBACTERIAL MAT PLUS DETRITAL DEPOSITS VERSUS A COMMERCIAL FEED. *J. World Aquacult. Soc.* 22(3):47A-48A. 1991. Abstract only. FR 37(2)

[Res. Cent. Sci. & Technol., Clark Atlanta Univ., Atlanta, GA 30314]

92-002208 Poston, Hugh A. CHOLINE REQUIREMENT OF SWIM-UP RAINBOW TROUT FRY. *Prog. Fish-Cult.* 53(4):220-223. 1991. FR 37(2)

[Tunison Lab. Fish Nutr., U.S. Fish & Wildl. Serv., 3075 Gracie Rd., Cortland, NY 13045-9357] *Oncorhynchus mykiss.*

92-002209 Ravi, J. and K. V. Devaraj. ESSENTIAL BRANCHED-CHAIN AMINO ACID REQUIREMENTS FOR CATLA, *CATLA CATLA*, FRY. *J. Appl. Aquacult.* 1(2):89-97. 1991. FR 37(2)

[45 Sundar Nagar, Near E.S.I. Hospital, Hyderbad-500 038 (A.P.), India]

92-002210 Reigh, Robert C.; Edwin H. Robinson and Paul B. Brown. EFFECTS OF DIETARY MAGNESIUM ON GROWTH AND TISSUE MAGNESIUM CONTENT OF BLUE TILAPIA *OREOCHROMIS AUREUS*. *J. World Aquacult. Soc.* 22(3):192-200. 1991. FR 37(2)

[School For., Wildl., & Fish., Agric. Exp. Stn., La. State Univ. Agric. Cent., Baton Rouge 70803]

92-002211 Robinette, H. Randall and Constance H. Young-Dubovsky. COMPARISON OF COMMERCIAL FEEDS FOR PRODUCTION OF PHASE III HYBRID STRIPED BASS. *J. World Aquacult. Soc.* 22(3):51A. 1991. Abstract only. FR 37(2)

[Young-Dubovsky: Fayetteville State Fish Hatchery, Rt. 21, Box 395, Fayetteville, NC 28304] *Morone saxatilis.*

92-002212 Robinson, Edwin H. IMPROVEMENT OF COTTONSEED MEAL PROTEIN WITH SUPPLEMENTAL LYSINE IN FEEDS FOR CHANNEL CATFISH. *J. Appl. Aquacult.* 1(2):1-14. 1991. FR 37(2)

[Miss. State Univ., Agric. & For. Exp. Stn., Delta Branch Res. & Ext. Cent., P.O. Box 197, Stoneville 38776] *Ictalurus punctatus.*

92-002213 Roem, Andries J.; Robert R. Stickney and Christopher C. Kohler. DIETARY PANTOTHENIC ACID REQUIREMENT OF THE BLUE TILAPIA. *Prog. Fish-Cult.* 53(4):216-219. 1991. FR 37(2)

[BP Nutr. Aquacult. Res. Cent., P.O. Box 532, N-4001 Stavanger, Norway] *Tilapia aurea.*

92-002214 Rogers, Gary L. INTEGRATION OF FEED AND WATER QUALITY MANAGEMENT FOR AQUACULTURE INTENSIFICATION. *J. World Aquacult. Soc.* 22(3):51A-52A. 1991. Abstract only. FR 37(2)

[Aeration Ind. Int., Inc., Minneapolis, MN 55459]

92-002215 Sbikin, Yu. N. and S. V. Budayev. SOME ASPECTS OF THE DEVELOPMENT OF FEEDING RELATIONSHIPS IN GROUPS OF YOUNG STURGEONS (ACIPENSERIDAE) DURING ARTIFICIAL REARING. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):23-30. 1991. FR 37(2)

[Inst. Evol. Morphol. & Ecol. Anim., Acad. Sci. USSR (IEMEZh), Moscow, USSR] *Acipenser stellatus* and *A. gueldenstaedti.*

92-002216 Smith, P. and J. S. Kilpatrick. FISH MEAL - A LIMITED RESOURCE? *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 125-132. 1991. In English with French summ. FR 37(2)

[Trout Int., 1350 E. Kent Ave., Vancouver, BC, Canada V5X 2Y2]

92-002217 Steffens, Werner. [PROSPECTS OF TROUT FEEDING.] *Oesterreichs Fischerei* 44(11/12):270-286. 1991. In German with English summ. FR 37(2)

[Inst. Binnenfischerei, Muggelseedamm 310, 1162 Berlin-Friedrichshagen, Bundesrepublik, Germany]

92-002218 Steffens, Werner; Heinz Richter; Siegfried Golbs; Hans Bentz; Siegfried Martin and Joachim Schleicher. USE OF ALKANE YEAST AND METHANOL-GROWN BACTERIAL BIOMASS AS PROTEIN SOURCES IN THE DIET OF RAINBOW TROUT. *Aquaculture* 100(1-3):235. 1992. Abstract only. FR 37(2)

[Inst. Inland Fish., Berlin-Friedrichshagen, Germany] *Oncorhynchus mykiss.*

92-002219 Teskeredzic, Zlatica; Dave A. Higgs; Bakhshish S. Dosanjh; Jack R. McBride; Dick M. Beames; Ron W. Hardy; John D. Jones; Maarit Simell; Timo Vaara; Russ B. Bridges and Ian Forster. EVALUATION OF UNDEPHYTINIZED AND DEPHYTINIZED RAPESEED PROTEIN CONCENTRATE AS SOURCES OF DIETARY PROTEIN FOR JUVENILE RAINBOW TROUT. *Aquaculture* 100(1-3):236. 1992. Abstract only. FR 37(2)

[DFO, Biol. Sci. Branch, West Vancouver Lab., West Vancouver, BC, Canada] *Oncorhynchus mykiss.*

FEEDS, FEEDING, AND NUTRITION (Continued)

92-002220 Tidwell, James H. and Carl D. Webster. PRODUCTION OF MARKETABLE-SIZE RAINBOW TROUT, *ONCORHYNCHUS MYKISS*, IN PONDS USING DIFFERENT FEEDING METHODS. *J. World Aquacult. Soc.* 22(3):59A. 1991. Abstract only. FR 37(2)

[Aquacult. Res. Cent., Ky. State Univ., Frankfort 40601]

92-002221 Tidwell, James H.; Carl D. Webster and Julia A. Clark. CHANGES IN THE FATTY ACID COMPOSITION OF CHANNEL CATFISH, *ICTALURUS PUNCTATUS*, TISSUES DURING FEEDING, STARVATION, AND REFEEDING. *J. World Aquacult. Soc.* 22(3):59A. 1991. Abstract only. FR 37(2)

[Aquacult. Res. Cent., Ky. State Univ., Frankfort 40601]

92-002222 Timo, Makinen and Ruohonen Kari. OPTIMUM ENERGY FEEDING OF FINNISH RAINBOW TROUT. *Aquaculture* 100(1-3):236. 1992. Abstract only. FR 37(2)

[Finnish Game & Fish. Res. Inst., Aquacult. Div., Helsinki, Finland] *Oncorhynchus mykiss.*

92-002223 Tsevis, Nikolaos; Spiros Klaoudatos and Alexis Conides. FOOD CONVERSION BUDGET IN SEA BASS, *DICENTRARCHUS LABRAX*, FINGERLINGS UNDER TWO DIFFERENT FEEDING FREQUENCY PATTERNS. *Aquaculture* 101(3/4):293-304. 1992. FR 37(2)

[Natl. Cent. Mar. Res., 166 04 Ag. Kosmas, Elliniko, Greece]

92-002224 Tuncer, Haluk and Reginal M. Harrell. ESSENTIAL FATTY ACID NUTRITION OF LARVAL STRIPED BASS (*MORONE SAXATILIS*) AND PALMETTO BASS (*M. SAXATILIS* X *M. CHRYSOPS*). *Aquaculture* 101(1/2):105-121. 1992. FR 37(2)

[Harrell: Univ. Md., Cent. Environ. & Estuarine Studies, Horn Point Environ. Lab., P.O. Box 775, Cambridge 21613]

92-002225 Tuncer, Haluk; Reginal M. Harrell and Tuu-Jyi Chai. QUANTITATIVE n-3 HUFA REQUIREMENTS OF LARVAL PALMETTO BASS (*MORONE SAXATILIS* X *M. CHRYSOPS*). *J. World Aquacult. Soc.* 22(3):60A. 1991. Abstract only. FR 37(2)

[Univ. Md., Cent. Environ. & Estuarine Studies, Horn Point Environ. Lab., P.O. Box 775, Cambridge 21613]

92-002226 Viola, S.; E. Lahav and Y. Arieli. RESPONSE OF ISRAELI CARP, *CYPRINUS CARPIO* L., TO LYSINE SUPPLEMENTATION OF A PRACTICAL RATION AT VARYING CONDITIONS OF FISH SIZE, TEMPERATURE, DENSITY AND RATION SIZE. *Aquacult. Fish. Manage.* 23(1):49-58. 1992. FR 37(2)

[Kfar Masaryk, D.N. Ashrat, 25208 Israel]

92-002227 Viola, Shlomoh and Eran Lahav. EFFECTS OF LYSINE SUPPLEMENTION IN PRACTICAL CARP FEEDS ON TOTAL PROTEIN SPARING AND REDUCTION OF POLLUTION. *Isr. J. Aquacult. Bamidgeh* 43(3):112-118. 1991. FR 37(2)

[Kfar Massaryk, D.N. Ashrat 25208, Israel] *Cyprinus carpio.*

92-002228 Webster, Carl D.; Richard T. Lovell and Joe Clawson. VARIATION IN QUALITY OF BRINE SHRIMP NAUPLII FOR FEEDING STRIPED BASS, *MORONE SAXATILIS*. *J. World Aquacult. Soc.* 22(3):63A-64A. 1991. Abstract only. FR 37(2)

[Aquacult. Res. Cent., Ky. State Univ., Frankfort 40601]

92-002229 Webster, Carl D.; James H. Tidwell and Daniel H. Yancey. SOYBEAN MEAL AS PARTIAL OR TOTAL REPLACEMENT FOR FISH MEAL IN BLUE CATFISH, *ICTALURUS FURCATUS*, DIETS. *J. World Aquacult. Soc.* 22(3):64A. 1991. Abstract only. FR 37(2)

[Aquacult. Res. Cent., Ky. State Univ., Frankfort 40601]

92-002230 Wisner, Brian B.; Thomas R. Capo and Jean Cramer. COMPARISON OF FOUR COMMERCIAL AQUACULTURE DIETS FOR RED DRUM. *J. World Aquacult. Soc.* 22(3):66A. 1991. Abstract only. FR 37(2)

[Exp. Fish Hatchery, Univ. Miami, Miami, FL 33149] *Sciaenops ocellatus.*

92-002231 Ximenes Carneiro, Antonio Romildo and Rodrigo Roubach. EXPERIMENTS IN THE NUTRITION OF *COLOSSOMA MACROPOMUM* (CHARACIDAE). I. FEEDING EFFICIENCY OF VEGETABLE AND ANIMAL PROTEINS. *J. World Aquacult. Soc.* 22(3):18A. 1991. Abstract only. FR 37(2)

[Inst. Nac. Pesq. Amazonia (INPA)/CPTA, CX. Postal 478, Manaus, AM, Brazil]

TRANSPORTING FISH

92-002232 Black, E. A.; B. Redfern and H. Rosenthal. NEW DEVELOPMENTS IN AIR TRANSPORTATION OF SALMON SMOLTS. *J. Appl. Ichthyol.* 7(4):249-252. 1991. In English with German and French summ. FR 37(2)

[British Columbia Minist. Agric. & Fish., Victoria, BC, Canada V8W 2Z7]

92-002233 Burton, Robin. FLOATING TANK TRANSPORTS FISH. *Freshwater Catch* No. 46. p. 15-17. 1991. FR 37(2)

TRANSPORTING FISH (Continued)

92-002234 Rode, Robert A.; Leonard L. Lovshin and Randell K. Goodman. COMPARISON OF THREE FISH-LOADING SYSTEMS TO HARVEST FOOD-SIZE CHANNEL CATFISH (*ICTALURUS PUNCTATUS*). *Aquacult. Eng.* 10(4):291-304. 1991. FR 37(2)
[Lovshin: Dep. Fish. & Allied Aquacult. & Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849]

AQUARIUMS

92-002235 Aber, Vicki. PEACOCK GUDGEONS, *TATEURNDINA OCELLICAUDA*, "HOW EASY CAN YOU GET?" *Colo. Aquarist* p. 16-17. Winter 1991. FR 37(2)

92-002236 Axelrod, Herbert R. SINGAPORE: MORE DISCUS ARE BRED IN SINGAPORE THAN ALL OTHER PLACE IN THE WORLD COMBINED. *Trop. Fish Hobbyist*40(7):138-142, 145-148, 150, 152-154, 157-162, 164-177. 1992. FR 37(2)

92-002237 Azuma, Hiroshi. BREEDING THE GOLD ASIAN AROWANA. *Trop. Fish Hobbyist* 40(5):10-12, 14, 16, 19-20, 22-23. 1992. FR 37(2)
Scleropages formosus.

92-002238 Barker, Paul. BREEDING DISCUS. *Trop. Fish Hobbyist* 40(1):20-22, 24. 1991. FR 37(2)
Symphysodon.

92-002239 Meyer, Kelly A. SURVEY AND ANALYSIS OF NATURAL AND ARTIFICIAL AQUARIUM SEAWATER. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 281-288. 1991. FR 37(2)
[Natl. Aquarium Baltimore, Pier 3, 501 E. Pratt St., Baltimore, MD 21202]

92-002240 Moreno, Daniel. 1991 AUSTRALIAN LUNGFISH BREEDING WORKSHOP AND FIELD STUDIES. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 297-301. 1991. FR 37(2)
[Rain & For. & Aquat., Cleveland Metroparks Zool. Park, Cleveland, OH] *Neoceratodus forsteri.*

92-002241 Palicka, Jiri. THE BRILLIANT RASBORA, *RASBORA BORAPETENSIS. Trop. Fish Hobbyist* 40(1):48, 50. 1991. FR 37(2)

92-002242 Palicka, Jiri. THE FEATHERFIN RAINBOWFISH, *IRIATHERINA WERNERI. Trop. Fish Hobbyist* 40(5):24, 26, 28, 30. 1992. FR 37(2)

92-002243 Palicka, Jiri. KEEPING *CTENOPOMA WEEKSI. Trop. Fish Hobbyist* 40(7):112-113. 1992. FR 37(2)

92-002244 Ritter, Janice Wasylenki and Roland J. McKay. LOOK OUT FOR THE BULLROUT *Trop. Fish Hobbyist* 40(1):100-104. 1991. FR 37(2)
Notesthes robusta.

92-002245 Robertson, Steven D. REPRODUCTION IN *PTEROIS LUNULATA. AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 277-280. 1991. FR 37(2)
[SDR Aquat., P.O. Box 180910, Dallas, TX 75218]

92-002246 Rosler, Hans-Jurgen. THE CARE AND BREEDING OF THE BLACK-FINNED PEARL KILLIE. *Trop. Fish Hobbyist* 40(1):108-113. 1991. FR 37(2)
Cynolebias nigripinnis.

92-002247 Rosler, Hans-Jurgen. THE CARE AND BREEDING OF THE CROAKING GOURAMI. *Trop. Fish Hobbyist* 40(5):106-110, 112. 1992. FR 37(2)
Trichopsis vittatus.

92-002248 Sabalones, Juan and David Labonne. SHARK MORTALITIES AT THE NATIONAL AQUARIUM IN BALTIMORE 1987-89: AN EXAMINATION OF THE CONTRIBUTING FACTORS. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 302-309. 1991. FR 37(2)
[Natl. Aquarium Baltimore, Pier 3, 501 E. Pratt St., Baltimore, MD 21202] *Carcharhinus plumbeus* and *Negaprion brevirostris.*

92-002249 Stratton, Richard F. FIRST LOVE: THE FIREMOUTH. *Trop. Fish Hobbyist* 40(1):126-128, 130. 1991. FR 37(2)
Cichlasoma meeki.

92-002250 Stratton, Richard F. *GIRELLA* MY DREAMS. *Trop. Fish Hobbyist* 40(7):68-70, 73, 76. 1992. FR 37(2)

92-002251 Stratton, Richard F. THE GRAY ANGELFISH, *POMACANTHUS ARCUATUS. Trop. Fish Hobbyist* 40(7):44-45, 48. 1992. FR 37(2)

92-002252 Vierke, Jorg. THE GENUS *APISTOGRAMMA* IN THE COMMUNITY AQUARIUM. *Trop. Fish Hobbyist* 40(5):124-126, 129-130, 132, 134-135. 1992. FR 37(2)

AQUARIUMS (Continued)

92-002253 Wimo, Jorgen. BREEDING THE LIONHEAD CICHLID, *STEATOCRANUS CASUARIUS*. *Trop. Fish Hobbyist* 40(7):26-30, 32. 1992. FR 37(2)

MISCELLANEOUS CULTURE TECHNIQUES AND EQUIPMENT

92-002254 Avault, James W., Jr. RECENT RESEARCH FINDINGS IN AQUACULTURE. *Aquacult. Mag.* 18(1):79-81. 1992. FR 37(2)
[Agric. Cent., La. State Univ., Baton Rouge] *Oncorhynchus mykiss, O. tshawytscha,* and *Morone saxatilis.*

92-002255 Bergheim, Asbjorn; Edward Andrew Seymour; Steinar Sanni; Torbjorn Tyvold and Sveinung Fivelstad. MEASUREMENTS OF OXYGEN CONSUMPTION AND AMMONIA EXCRETION OF ATLANTIC SALMON (*SALMO SALAR* L.) IN COMMERCIAL-SCALE, SINGLE-PASS FRESHWATER AND SEAWATER LANDBASED CULTURE SYSTEMS. *Aquacult. Eng.* 10(4):251-267. 1991. FR 37(2)
[Rogaland Res. Inst., Box 2503, Ullandhaug, 4004 Stavanger, Norway]

92-002256 Broussard, Meryl C., Jr. THE FUTURE OF CLOSED SYSTEM TECHNOLOGY IN AQUACULTURE DEVELOPMENT - ILLUSION OR INNOVATION. *J. World Aquacult. Soc.* 22(3):16A. 1991. Abstract only. FR 37(2)
[Coop. State Res. Serv., U.S. Dep. Agric., Washington, DC 20251]

92-002257 Brown, Christopher L. and David E. Coleman. TELECOMMUNICATION ACCESS TO CD-ROM AQUACULTURE DATABASES AND APPLICATIONS FOR REMOTE ISLAND AQUACULTURE SITES. *J. World Aquacult. Soc.* 22(3):17A. 1991. Abstract only. FR 37(2)
[Inst. Mar. Biol., Univ. Hawaii, Manoa 96774]

92-002258 Chang, Ching-Fong; Hung-Jen Hu and Lian-Tien Sun. STIMULATION OF OVULATION IN AYU, *PLECOGLOSSUS ALTIVELIS,* BY TREATMENT WITH ANTIESTROGENS AND LUTEINIZING HORMONE RELEASING HORMONE ANALOGUE. *J. World Aquacult. Soc.* 22(3):19A. 1991. Abstract only. FR 37(2)
[Dep. Aquacult., Natl. Taiwan Ocean Univ., Keelung, Taiwan 20224]

92-002259 Chen, Shulin; Michael B. Timmons; Daniel J. Aneshansley and James J. Bisogni, Jr. BUBBLE SIZE AND RISING VELOCITY IN FOAM SEPARATION AND AERATION APPLIED TO RECIRCULATING AQUACULTURAL SYSTEMS. *J. World Aquacult. Soc.* 22(3):19A. 1991. Abstract only. FR 37(2)
[Dep. Civil Eng., La. State Univ., Baton Rouge 70803]

92-002260 Coffin, David E.; James E. Robin and Ronald F. Malone. EFFECT OF BACKFLUSHING FREQUENCY ON CARRYING CAPACITY OF UPFLOW LOW-DENSITY MEDIA BIOFILTERS. *J. World Aquacult. Soc.* 22(3):20A. 1991. Abstract only. FR 37(2)
[Dep. Civil Eng., La. State Univ. Baton Rouge 70803-6405]

92-002261 Colt, John E.; James M. Montgomery and Anthonie M. Schuur. APPLICATION OF BIOENERGETIC AND CHEMICAL ALGORITHMS TO COMPUTERIZED MANAGEMENT MODELS FOR INTENSIVE AQUACULTURE SYSTEMS. *J. World Aquacult. Soc.* 22(3):20A-21A. 1991. Abstract only. FR 37(2)
[Consult. Eng., Inc., 2375 130th Ave., Suite 200, Bellevue, WA 98006]

92-002262 Drapcho, Caye M. and David E. Brune. OPTIMIZATION OF THE PARTITIONED AQUACULTURE SYSTEM. *J. World Aquacult. Soc.* 22(3):23A. 1991. Abstract only. FR 37(2)
[Dep. Agric. & Biol. Eng., Clemson Univ., Clemson, SC 29634]

92-002263 Duhe, Timothy A. FLEXIBLE MEMBRANE LINERS FOR AQUATIC REARING PONDS: HOW TO DIFFERENTIATE. *J. World Aquacult. Soc.* 22(3):23A. 1991. Abstract only. FR 37(2)
[Du Pont Polymers, Wilmington, DE 19893]

92-002264 Dwyer, William P. and James E. Peterson. EVALUATION OF THE LOW HEAD OXYGENATOR AT THE GIANT SPRINGS STATE FISH HATCHERY GREAT FALLS, MONTANA. *U.S. Fish Wildl. Serv. Bozeman Inf. Leafl.* No. 69. 14p. 1992. FR 37(2)
[U.S. Fish & Wildl. Serv., Fish Technol. Cent., 4050 Bridger Canyon Rd., Bozeman, MT 59715]

92-002265 Eikebrokk, Bjornar. SYSTEM BIOFISH - THE FUTURE WAY OF WATER REUSE IN FISH FARMING. *J. World Aquacult. Soc.* 22(3):23A. 1991. Abstract only. FR 37(2)
[Found. Sci. & Ind. Res., Norwegian Inst. Technol. (SINTEF), N-7034 Trondheim, Norway] *Salmo salar* and *Oncorhynchus mykiss.*

92-002266 Fast, Arlo W. A FLOATING FISH CAGE WITH SOLID PLASTIC MEMBRANE AND PUMPED WATER EXCHANGE. *J. Appl. Aquacult.* 1(2):99-110. 1991. FR 37(2)
[Inst. Mar. Biol., Univ. Hawaii Manoa, P.O. Box 1346, Kaneohe 96744]

92-002267 Fivelstad, Sveinung; Asbjorn Bergheim and Torbjorn Tyvold. STUDIES OF LIMITING FACTORS GOVERNING THE WATERFLOW REQUIREMENT FOR ATLANTIC SALMON (*SALMO SALAR* L.) IN LANDBASED SEAWATER SYSTEMS. *Aquacult. Eng.*10(4):237-249. 1991. FR 37(2)
[Bergen Coll. Eng., Lars Hillesgate 34, 5008 Bergen, Norway]

MISCELLANEOUS CULTURE TECHNIQUES AND EQUIPMENT (Continued)

92-002268 Formicki, Krzysztof; Andrzej Sobocinski; Aleksander Winnicki and Zbigniew Mongialo. EFFECTS OF FERTILIZING SEA TROUT (*SALMO TRUTTA* L.) EGGS WITH SPERMATOZOA EXPOSED TO A MAGNETIC FIELD. *Acta Ichthyol. Piscatoria* 21(1):99-104. 1991. In English with Polish summ. FR 37(2)
[Inst. Ichtiol. Akad. Rolnicza, ul. K. Krolewicza 4, 71-550 Szczecin, Poland]

92-002269 Forteath, N. BIOTECHNOLOGY FOR AQUACULTURE. *Aust. J. Biotechnol.* 4(4):282-285. 1990. From Anim. Breeding Abstr. 59(11):8021. 1991. FR 37(2)
[Natl. Key Cent. Teaching & Res. Aquacult., Tasmanian State Inst. Technol., Launceston, Tasm., Australia] *Oncorhynchus mykiss* and *Lates calcarifer* in Australia.

92-002270 Fowler, L. G. and J. L. Banks. A SAFE LEVEL OF IODOPHOR FOR TREATING EGGS OF FALL CHINOOK SALMON DURING WATER HARDENING. *Prog. Fish-Cult.* 53(4):250-251. 1991. FR 37(2)
[Rangen, Inc., P.O. Box 706, Buhl, ID 83316-0706] *Oncorhynchus tshawytscha.*

92-002271 Friedmann, B. R. INTENSIVE CULTURE TECHNIQUES FOR STRIPED BASS FINGERLINGS. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 49-55. 1991. FR 37(2)
[EA Eng. Sci., & Technol., Maple Bldg., 3 Washington Cent., Newburg, NY 12550] *Morone saxatilis.*

92-002272 Fujita, Shinji; Kazuo Fukahori and Hideyuki Nishinokubi. [TENSION OF THE MOORING ROPES ON THE NET CAGE MODEL OF RAFT TYPE IN REGULAR WAVES.] *Nippon Suisan Gakkaishi* 57(12):2229-2235. 1991. In Japanese with English summ. FR 37(2)
[Fac. Fish., Nagasaki Univ., Bunkyomachi, Nagasaki 852, Japan]

92-002273 Green, Bartholomew W. and David R. Teichert-Coddington. GROWTH OF NORMAL AND SEX REVERSED *OREOCHROMIS NILOTICUS* DURING HORMONE TREATMENT, NURSERY AND GROW-OUT PHASES IN EARTHEN PONDS. *J. World Aquacult. Soc.* 22(3):27A. 1991. Abstract only. FR 37(2)
[Dep. Fish. & Allied Aquacult., Auburn Univ., AL 36849-5419]

92-002274 Green, Bartholomew W. and David R. Teichert-Coddington. COMPARISON OF TWO SAMPLERS USED WITH AN AUTOMATED DATA ACQUISITION SYSTEM IN WHOLE-POND, COMMUNITY METABOLISM STUDIES. *Prog. Fish-Cult.* 53(4):236-242. 1991. FR37(2)
[Dep. Fish. & Allied Aquacult., Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849-5419]

92-002275 Grobler, Eurika; Gert J. Steyn and Johan H. J. van Vuren. IMPROVED FERTILIZATION SUCCESS OF RAINBOW TROUT BY MEANS OF A SPERM DILUENT. *Aquaculture* 100(1-3):325. 1992. Abstract only. FR 37(2)
[Dep. Zool., Rand Afrikaans Univ., Box 524, Johannesburg 2000, South Africa] *Oncorhynchus mykiss.*

92-002276 Hanson, T. R. and Lu. Hatch. APPLYING RISK ANALYSIS TO SUBSISTENCE AQUACULTURE FARMING IN GUATEMALA. *J. World Aquacult. Soc.* 22(3):28A. 1991. Abstract only. FR 37(2)
[Auburn Univ., Dep. Agric. Econ. & Rural Sociol., Auburn, AL 36849] *Tilapia nilotica.*

92-002277 Heinen, John M.; Joseph A. Hankins and Barnaby J. Watten. EVALUATION OF RECIRCULATING FISH CULTURE SYSTEMS UTILIZING CROSS-FLOW RACEWAYS, MULTI-STAGE OXYGENATORS, MICROSCREEN PARTICULATE FILTERS, AND FLUIDIZED-BED BIOFILTERS. *J. World Aquacult. Soc.* 22(3):29A. 1991. Abstract only. FR 37(2)
[Zeigler Bros. Inc., Spring & Ground Water Resour. Inst., P.O. Box 1746, Shepherdstown, WV 25443] *Oncorhynchus mykiss.*

92-002278 Hoose, Karl V. and John G. Riley. RECIRCULATING SEAWATER SYSTEM FOR SALMON. *J. World Aquacult. Soc.* 22(3):30A. 1991. Abstract only. FR 37(2)
[Bio-Resour. Eng. Dep., Univ. Maine, Orono 04469] *Salmo salar.*

92-002279 Huner, Jay V. CLOSED SYSTEM INTENSIVE AQUACULTURE-SOME BASICS. *Farm Pond Harvest* 26(1):11-14, 31. 1992. FR 37(2)
[P. O. Box 44509, Lafayette, LA 70504]

92-002280 Jolly, Curtis M. THE USE OF ARIMA MODELS IN FORECASTING CATFISH MARKET PRICES. *J. World Aquacult. Soc.* 22(3):31A. 1991. Abstract only. FR 37(2)
[Dep. Agric. Econ. & Rural Sociol., Auburn Univ., Auburn, AL 36849-5406] *Ictalurus punctatus.*

92-002281 Juell, Jon-Erik. HYDROACOUSTIC DETECTION OF FOOD WASTE - A METHOD TO ESTIMATE MAXIMUM FOOD INTAKE OF FISH POPULATIONS IN SEA CAGES. *Aquacult. Eng.* 10(3):207-217. 1991. FR 37(2)
[Inst. Fish. Technol. Res., P.O. Box 1964, N-5024 Bergen, Norway]

92-002282 Kaiser, G. Ellen and James Szyper. AUTOMATED AMMONIA MONITORING IN FRESHWATER AQUACULTURE PONDS. *J. World Aquacult. Soc.* 22(3):32A. 1991. Abstract only. FR 37(2)
[Maricult. Res. & Training Cent., Kaneohe, HI 96744]

MISCELLANEOUS CULTURE TECHNIQUES AND EQUIPMENT (Continued)

92-002283 Kaplan, Eugene H. DESCRIPTION OF A SEMI-COMMERCIAL CLOSED RECIRCULATING SYSTEM AND A PROPOSAL TO ESTABLISH AN INTERNATIONAL WARMWATER FINFISH HYBRID EVALUATION CENTER. *J. World Aquacult. Soc.* 22(3):32A. 1991. Abstract only. FR 37(2)
[Hofstra Univ. Mar. Lab., Hempstead, NY 11550]

92-002284 Killcreas, Wallace E. and Tara English. AN ENHANCED VERSION OF FISHY, A MICROCOMPUTER PROGRAM FOR FISH PRODUCTION MANAGEMENT. *J. World Aquacult. Soc.* 22(3):33A. 1991. Abstract only. FR 37(2)
[Agric. Econ. Dep., Agric. & For. Exp. Stn., Mississippi State, MS 39762]

92-002285 Kushnirov, David and Gad Degani. GROWTH PERFORMANCE OF EUROPEAN EEL (*ANGUILLA ANGUILLA*) UNDER CONTROLLED PHOTOCYCLE AND SHELTER AVAILABILITY. *Aquacult. Eng.* 10(3):219-226. 1991. FR 37(2)
[Dep. Zool., Hebrew Univ. Jerusalem, Jerusalem, Israel]

92-002286 Lee, Phillip G.; Philip E. Turk and John Whitson. COMPUTER AUTOMATION AND EXPERT SYSTEMS FOR THE CONTROL OF RECIRCULATING AQUACULTURE FILTRATION SYSTEMS. *J. World Aquacult. Soc.* 22(3):35A. 1991. Abstract only. FR 37(2)
[Mar. Biomed. Inst., Univ. Tex. Med. Branch, Galveston, TX 77550]

92-002287 Losordo, Thomas M. CLOSED RECIRCULATING SYSTEMS. *J. World Aquacult. Soc.* 22(3):37A. 1991. Abstract only. FR 37(2)
[N.C. State Univ., Raleigh 27695]

92-002288 Mote, Harry. DUAL WATER SUPPLY FOR MAINE HATCHERY MINIMIZES HEATING COSTS. *Aquacult. Mag.* 18(2):86-90. 1992. FR 37(2)
Salmo salar.

92-002289 Neufeld, T. and Royann J. Petrell. BIOPHYSICAL MODEL OF FLOATING VERTICAL RACEWAY. *J. World Aquacult. Soc.* 22(3):44A-45A. 1991. Abstract only. FR 37(2)
[Univ. British Columbia, Dep. Bio-Resour. Eng., 2357 Main Hall, Vancouver, BC, Canada V4T 1W5] *Oncorhynchus.*

92-002290 Piedrahita, Raul H. and Philip Giovannini. FERTILIZED NON-FED POND SYSTEMS. *J. World Aquacult. Soc.* 22(3):48A. 1991. Abstract only. FR 37(2)
[Dep. Agric. Eng., Univ. Calif., Davis 95616]

92-002291 Piedrahita, Raul H. ENGINEERING CONSIDERATIONS FOR WARM WATER HATCHERY DESIGN. *J. World Aquacult. Soc.* 22(3):48A. 1991. Abstract only. FR 37(2)
[Dep. Agric. Eng., Univ. Calif., Davis 95616]

92-002292 Piedrahita, Raul H. SIMULATION OF SHORT-TERM MANAGEMENT ACTIONS TO PREVENT OXYGEN DEPLETION IN PONDS. *J. World Aquacult. Soc.* 22(3):157-166. 1991. FR 37(2)
[Dep. Agric. Eng. & Aquacult. & Fish. Program, Univ. Calif., Davis 95616]

92-002293 Rakocy, James E; John A. Hargreaves and Donald S. Bailey. COMPARATIVE WATER QUALITY DYNAMICS IN A RECIRCULATING SYSTEM WITH SOLIDS REMOVAL AND FIXED-FILM OR ALGAL BIOFILTRATION. *J. World Aquacult. Soc.* 22(3):49A. 1991. Abstract only. FR 37(2)
[Univ. Virgin Islands, Agric. Exp. Stn., RR 2, Box 10,000, Kingshill, U.S. Virgin Islands 00850] *Tilapia nilotica.*

92-002294 Randall, Clive F. and Niall R. Bromage. SHORT PERIODS OF CONTINUOUS LIGHT PROVIDE A SIMPLE, CHEAP AND PREDICTABLE METHOD FOR THE PRODUCTION OF OUT-OF-SEASON RAINBOW TROUT EGGS. *Aquaculture* 100(1-3):172-173. 1992. Abstract only. FR 37(2)
[Inst. Aquacult., Univ. Stirling, Stirling, Scotland] *Oncorhynchus mykiss.*

92-002295 Rogers, Gary L.; Charles P. Madenjian and Arlo W. Fast. ESTIMATION OF OXYGEN TRANSFER RATES FOR MECHANICAL AERATORS IN BRACKISHWATER AQUACULTURE PONDS. *J. Appl. Aquacult.* 1(2):63-77. 1991. FR 37(2)
[Aeration Ind. Int., Inc., 4100 Peavey Rd., Chaska, MN 55318]

92-002296 Struve, Michael R. and David R. Bayne. ISOLATION COLUMNS AS AN ALTERNATIVE TO REPLICATE PONDS IN AQUACULTURE RESEARCH. *J. Appl. Aquacult.* 1(2):15-35. 1991. FR 37(2)
[Dep. Fish. & Allied Aquacult., Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849]

92-002297 Thomsen, Robert D. and Kevin A. Muench. A COMPUTER DATA MANAGEMENT PROGRAM DESIGN FOR AQUACULTURE. *J. World Aquacult. Soc.* 22(3):59A. 1991. Abstract only. FR 37(2)
[Island Sci., 1650 Indian Valley Rd., Novato, CA 94948]

MISCELLANEOUS CULTURE TECHNIQUES AND EQUIPMENT (Continued)

92-002298 Turnbull, Ross D. and Michael B. Timmons. OPERATION OF ROTATING BIOLOGICAL CONTACTORS IN FRESHWATER, HIGH-DENSITY, RECIRCULATING, AQUACULTURE SYSTEMS. *J. World Aquacult. Soc.* 22(3):60A-61A. 1991. Abstract only. FR 37(2)
[Dep. Agric. & Biol. Eng., Cornell Univ., Ithaca, NY 14850]

92-002299 Wangaard, David B.; John P. McDonell; Carl V. Burger and Richard L. Wilmot. APPARATUS FOR PRECISE REGULATION AND CHILLING OF WATER TEMPERATURES IN LABORATORY STUDIES. *Prog. Fish-Cult.* 53(4):251-255. 1991. FR 37(2)
[Burger: U.S. Fish & Wildl. Serv., Fish & Wildl. Res. Cent., 1011 E. Tudor Rd., Anchorage, AK 99503]

92-002300 Weaver, Dallas E. THE USE OF MICROCOMPUTERS FOR COMPETITIVE ADVANTAGE. *J. World Aquacult. Soc.* 22(3):63A. 1991. Abstract only. FR 37(2)
[Sci. Hatcheries, Huntington Beach, CA 92646]

92-002301 Westerman, Philip W.; Thomas M. Losordo and Raul H. Piedrahita. REVIEW OF BIOLOGICAL NITRIFICATION ALTERNATIVES FOR RECIRCULATING AQUACULTURE SYSTEMS. *J. World Aquacult. Soc.* 22(3):64A. 1991. Abstract only. FR 37(2)
[Dep. Biol. & Agric. Eng., N.C. State Univ., Raleigh 27695-7625]

92-002302 Wheaton, Fred W. PARTIAL RECYCLING SYSTEM DESIGN. *J. World Aquacult. Soc.* 22(3):64A-65A. 1991. Abstract only. FR 37(2)
[Agric. Eng. Dep., Univ. Md., College Park 20742]

92-002303 Whitson, John; Addison L. Lawrence and Phillip G. Lee. A PREDICTION OF FEASIBILITY OF DENITRIFICATION OF CLOSED RECIRCULATING MARINE SYSTEMS. *J. World Aquacult. Soc.* 22(3):65A. 1991. Abstract only. FR 37(2)
[Tex. A&M Shrimp Maricult. Proj., P.O. Drawer Q, Port Aransas 78373]

92-002304 Woiwode, John G. RECENT ADVANCES IN PREDICTIVE RECIRCULATING AQUACULTURE TECHNOLOGY. *J. World Aquacult. Soc.* 22(3):66A. Abstract only. 1991. FR 37(2)
[Aquamatrix Int., Inc., Box 2437, Jackson, WY 83001]

92-002305 Wortman, Brian and Fred Wheaton. TEMPERATURE EFFECTS ON BIODRUM NITRIFICATION. *Aquacult. Eng.* 10(3):183-205. 1991. FR 37(2)
[Agric. Eng. Dep., Univ. Md., College Park 20742]

92-002306 Wright, Terry E. DEVELOPMENT AND UTILIZATION OF A CENTRALIZED SOFTWARE PROGRAM TO ANALYZE AND COMPARE OPTIONS FOR HATCHERY OPERATION, EFFICIENCY AND EFFECTIVENESS. *J. World Aquacult. Soc.* 22(3):66A. 1991. Abstract only. FR 37(2)
[Northwest Indian Fish. Comm., Olympia, WA 98506]

92-002307 Young, J. A.; M. F. Capra and A. W. Blackshaw. CRYOPRESERVATION OF SUMMER WHITING (*SILLAGO CILIATA*) SPERMATOZOA. *Aquaculture* 102(1/2):155-160. 1992. FR 37(2)
[School Life Sci., Queensland Univ. Technol., Brisbane, Qld. 4001, Australia]

GENERAL LIMNOLOGY AND OCEANOGRAPHY

92-002308 Ghilarov, Alexej M. ECOLOGY, MYTHOLOGY AND THE ORGANISMIC WAY OF THINKING IN LIMNOLOGY. *Trends Ecol. Evol.* 7(1):22-24. 1992. FR 37(2)
[Dep. Vertebr. Zool. & Gen. Ecol., Biol. Fac., Moscow Univ., Moscow 119899, USSR]

92-002309 Lazzaro, Xavier T. PLANKTIVOROUS FISHES, PLANKTON DYNAMICS, AND WATER QUALITY: QUANTIFYING THE EFFECTS OF FORAGING MODE AND FISH BIOMASS. *Ph.D. dissertation, Ohio State Univ.* 219p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):3999. 1992. Order No. DA9130505. FR 37(2)
Geophagus brasiliensis, Dorosoma cepedianum, Lepomis macrochirus, and *Tilapia rendalli.*

PHYSICAL LIMNOLOGY AND OCEANOGRAPHY

92-002310 Pearce, A. F. and D. I. Walker, editors. THE LEEUWIN CURRENT: AN INFLUENCE ON THE COASTAL CLIMATE AND MARINE LIFE OF WESTERN AUSTRALIA. PROCEEDINGS OF A SYMPOSIUM OF THE ROYAL SOCIETY OF WESTERN AUSTRALIA AND THE WESTERN AUSTRALIAN BRANCH OF THE AUSTRALIAN MARINE SCIENCES ASSOCIATION, PERTH, WESTERN AUSTRALIA, MARCH 1991. *J. R. Soc. West. Aust.* 74(1):140p. 1991. FR 37(2)
[CSIRO Div. Oceanogr., P.O. Box 20, North Beach, W.A. 6020, Australia]

92-002311 Schwing, Franklin B.; David M. Husby; Newell Garfield and Dan E. Tracy. MESOSCALE OCEANIC RESPONSE TO WIND EVENTS OFF CENTRAL CALIFORNIA IN SPRING 1989: CTD SURVEYS AND AVHRR IMAGERY. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 47-62. 1991. In English with Spanish summ. FR 37(2)
[Pac. Fish. Environ. Group, Southwest Fish. Sci. Cent., P.O. Box 831, Monterey, CA 93942] *Sebastes.*

CHEMICAL LIMNOLOGY AND OCEANOGRAPHY

92-002312 Benndorf, Jurgen and Uwe Miersch. PHOSPHORUS LOADING AND EFFICIENCY OF BIOMANIPULATION. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2482-2488. 1989. FR 37(2)
[Tech. Univ. Dresden, Sekt. Wasserwesen, Bereich Hydrobiol., Mommsenstr. 13, D-8027 Dresden, Germany]

92-002313 Weatherley, N. S. and S. J. Ormerod. THE BIOLOGICAL RESPONSE OF ACIDIC STREAMS TO CATCHMENT LIMING COMPARED TO THE CHANGES PREDICTED FROM STREAM CHEMISTRY. *J. Environ. Manage.* 34(2):105-115. 1992. FR 37(2)
[Natl. Rivers Authority, Rivers House, St. Mellons Business Park, Cardiff CF3 0LT, Wales] *Salmo salar* and *S. trutta* in Wales.

BENTHOS

92-002314 Kneib, R. T. INDIRECT EFFECTS IN EXPERIMENTAL STUDIES OF MARINE SOFT-SEDIMENT COMMUNITIES. *Am. Zool.* 31(6):874-885. 1991. FR 37(2)
[Univ. Ga., Mar. Inst., Sapelo Island 31327]

92-002315 Sullivan, Barbara K.; Peter H. Doering; Candace A. Oviatt; Aimee A. Keller and Jeffrey B. Frithsen. INTERACTION WITH THE BENTHOS ALTER PELAGIC FOOD WEB STRUCTURE IN COASTAL WATERS. *Can. J. Fish. Aquat. Sci.* 48(11):2276-2284. 1991. In English with French summ. FR 37(2)
[Mar. Ecosyst. Res. Lab., Grad. School Oceanogr., Univ. R.I., Narragansett 02882-1197]

92-002316 Tremaine, S. C. and A. L. Mills. THE ROLE OF SEDIMENT MICROBIAL FOOD WEBS IN THE RECOVERY OF ACIDIFIED LAKES. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2574. 1989. Abstract only. FR 37(2)
[Hydrosyst., Inc., 2340 Commonwealth Dr., Charlottesville, VA 22901]

PLANKTON

92-002317 Drenner, R. W. and J. D. Smith. BIOMASS-DEPENDENT EFFECTS OF MOSQUITOFISH ON ZOOPLANKTON, CHLOROPHYLL AND THE SIZE DISTRIBUTION OF PARTICULATE PHOSPHORUS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2382-2386. 1989. FR 37(2)
[Dep. Biol., Tex. Christian Univ., Fort Worth 76129] *Gambusia affinis.*

92-002318 Whiteside, M. C. SIZE-RESTRICTIVE PREDATION: IMPACTS ON ZOOPLANKTON COMMUNITIES. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2365. 1989. Abstract only. FR 37(2)
[Dep. Biol., Univ. Minn., Duluth 55812]

MORPHOLOGY

92-002319 Al-Goshae, H. and S. M. Bunt. SELECTION OF PATHWAYS BY REGENERATING AXONS IN THE TRANSECTED SPINAL CORD OF THE GOLDFISH. *J. Physiol. (Camb.)* Vol. 446. p. 43. 1992. FR 37(2)
[Dep. Anat. & Physiol., Univ. Dundee, Dundee DD1 4HN, Scotland] *Carassius auratus.*

92-002320 Alekseyev, S. S. and A. F. Kirillov. ON THE MORPHOLOGY AND DISTRIBUTION OF TWO FORMS OF LENOK, *BRACHYMYSTAX* GUNTHER (SALMONIDAE), IN THE LENA RIVER BASIN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):102-109. 1991. FR 37(2)
[Biol. Dep., Moscow State Univ., Moscow, USSR] *B. lenok* in the USSR.

92-002321 Ayvazian, Suzanne G. and William H. Krueger. LATERAL PLATE ONTOGENY IN THE NORTH AMERICAN NINESPINE STICKLEBACK, *PUNGITIUS OCCIDENTALIS*. *Copeia* 1992(1):209-214. 1992. FR 37(2)
[Krueger: Dep. Zool., Univ. R.I., Kingston 02881]

92-002322 Balushkin, A. V. and A. V. Gushchin. NEW FINDING OF THE MULTISPINED SKATE, *BATHYRAJA MULTISPINIS* (NORMAN), IN THE SOUTHWEST ATLANTIC. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):95-98. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR]

92-002323 Barsukov, V. V. ROCKFISHES OF THE *SEBASTES INERMIS* COMPLEX OF THE SUBGENUS *SEBASTODES* (SEBASTES, SCORPAENIDAE). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):1-23. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR] *S. cheni, S. ventricosus, S. joyneri, S. thompsoni,* and *S. atrovirens.*

92-002324 Bellardi, Sergio; Gilberto Forneris and Giovanni Battista Palmegiano. [*SALMO TRUTTA* AND *SALMO TRUTTA MARMORATUS* COMPARATIVE EMBRYOGENESIS.] *Ann. Fac. Med. Vet. Torino* No. 33. p. 3-12. 1988-1990. In Italian with English summ. FR 37(2)
[Dip. Morfofisiol. Vet., Univ. Degli Studi Torino, Torino, Italy]

92-002325 Belyanina, T. N. LARVAL AND JUVENILE *BROTULA* (*BROTULA* SP., OPHIDIIDAE) FROM THE SAYA DE MALHA BANK. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):129-133. 1991. FR 37(2)
[Oceanol. Inst., USSR Acad. Sci. (IOAN), Moscow, USSR]

MORPHOLOGY (Continued)

92-002326 Belyapeva, Ye. S. STRUCTURAL FEATURES OF THE DIGESTIVE TRACT OF THE PADDLEFISH, *POLYODON SPATHULA*, DURING EARLY ONTOGENY. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):41-57. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR]

92-002327 Bemis, W. E. and L. Grande. DEVELOPMENT OF THE HEAD OF THE PADDLEFISH *POLYODON SPATHULA*. I. EXTERNAL FEATURES AND STAGING. *Am. Zool.* 31(5):8A. 1991. Abstract only. FR 37(2)
[Univ. Mass., Amherst]

92-002328 Benjamin, M. and J. R. Ralphs. EXTRACELLULAR MATRIX OF CONNECTIVE TISSUES IN THE HEADS OF TELEOSTS. *J. Anat.* Vol. 179. p. 137-148. 1991. FR 37(2)
[Dep. Anat., Univ. Wales, Coll. Cardiff, P.O. Box 900, Cardiff CF1 3YF, Wales] Data for 12 species.

92-002329 Bleckmann, H.; U. Niemann and B. Fritzsch. PERIPHERAL AND CENTRAL ASPECTS OF THE ACOUSTIC AND LATERAL LINE SYSTEM OF A BOTTOM DWELLING CATFISH, *ANCISTRUS* SP. *J. Comp. Neurol.* 314(3):452-466. 1991. FR 37(2)
[Fak. Biol. II, Univ. Bielefeld, W-4800 Bielefeld 1, Germany]

92-002330 Boglione, C.; B. Bertolini; M. Russiello and S. Cataudella. EMBRYONIC AND LARVAL DEVELOPMENT OF THE THICK-LIPPED MULLET (*CHELON LABROSUS*) UNDER CONTROLLED REPRODUCTION CONDITIONS. *Aquaculture* 101(3/4):349-359. 1992. FR 37(2)
[Dip. Biol. Anim. dell'Uomo, Univ. Rome 1, Rome, Italy]

92-002331 Bogutskaya, H. G. LIMITS AND MORPHOLOGICAL FEATURES OF THE CYPRINID SUBFAMILY LEUCISCINAE (CYPRINIDAE). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):79-94. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR]

92-002332 Bogutskaya, N. G. DEVELOPMENT OF THE WEBERIAN APPARATUS DURING ONTOGENY OF SOME SPECIES OF CYPRINIDAE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):109-120. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR] *Abramis brama, Rutilus rutilus, Alburnus alburnus,* and *Carassius auratus.*

92-002333 Bolker, J. A. EXPERIMENTAL ANALYSES OF GASTRULATION IN THE WHITE STURGEON. *Am. Zool.* 31(5):5A. 1991. Abstract only. FR 37(2)
[Univ. Calif., Berkeley] *Acipenser transmontanus.*

92-002334 Bolker, Jessica A. and Keith S. Thomson. ABNORMAL CRANIOFACIAL DEVELOPMENT IN CYCLOPIC SALMONID FISHES. *J. Morphol.* 211(1):23-29. 1992. FR 37(2)
[Thomson: Acad. Nat. Sci., 1900 Benjamin Franklin Pkwy., Philadelphia, PA 19103-1195] *Oncorhynchus mykiss* and *Salmo trutta.*

92-002335 Brodin, Lennart; Tomas Hokfelt; Sten Grillner and Pertti Panula. DISTRIBUTION OF HISTAMINERGIC NEURONS IN THE BRAIN OF THE LAMPREY *LAMPETRA FLUVIATILIS* AS REVEALED BY HISTAMINE-IMMUNOHISTOCHEMISTRY. *J. Comp. Neurol.* 292(3):435-442. 1990. FR 37(2)
[Nobel Inst. Neurophysiol., Karolinska Inst., S-104 01 Stockholm, Sweden]

92-002336 Brown, P. GILL CHLORIDE CELL SURFACE-AREA IS GREATER IN FRESHWATER-ADAPTED ADULT SEA TROUT (*SALMO TRUTTA*, L.) THAN THOSE ADAPTED TO SEA WATER. *J. Fish Biol.* 40(3):481-484. 1992. FR 37(2)
[Inland Fish. Res. Stn., P.O. Box 182, Narrandera, N.S.W. 2700, Australia]

92-002337 Christiansen, Jorgen Schou and Malcolm Jobling. HISTOMORPHOLOGICAL CHANGES IN EPIDERMAL STRUCTURE OF JUVENILE ARCTIC CHARR (*SALVELINUS ALPINUS* L.) SUBJECTED TO SUSTAINED EXERCISE. *Can. J. Zool.* 69(9):2450-2455. 1991. In English with French summ. FR 37(2)
[Norwegian Coll. Fish. Sci., Univ. Tromso, N-9000 Tromso, Norway]

92-002338 Davenport, John. WING-LOADING, STABILITY AND MORPHOMETRIC RELATIONSHIPS IN FLYING FISH (EXOCOETIDAE) FROM THE NORTH-EASTERN ATLANTIC. *J. Mar. Biol. Assoc. U.K.* 72(1):25-39. 1992. FR 37(2)
[Univ. Mar. Biol. Stn., Millport, Isle of Cumbrae KA28 0EG, England] *Exocoetus obtusirostris, Oxyporhamphus micropterus,* and data for 14 other species.

92-002339 de Miguel, Encarnacion; Hans-Joachim Wagner and Ramon Anadon. ULTRASTRUCTURAL STUDY OF THE RETINAL PIGMENT EPITHELIUM DURING METAMORPHOSIS IN THE SEA LAMPREY (*PETROMYZON MARINUS* L.). *Cell Tissue Res.* 267(2):375-384. 1992. FR 37(2)
[Anadon: Dep. Fundamental Biol., Univ. Santiago, E-15706 Santiago de Compostela, Spain]

92-002340 Didier, D. A. COMPARATIVE MORPHOLOGY OF TOOTH PLATES IN EXTANT HOLOCEPHALANS. *Am. Zool.* 31(5):96A. 1991. Abstract only. FR 37(2)
[Univ. Mass., Amherst] *Callorhinchus, Rhinochimaera, Harriotta, Neoharriotta, Chimaera,* and *Hydrolagus.*

MORPHOLOGY (Continued)

92-002341 Dorofeyeva, Ye. A.; T. Vukovich and D. Seratlich. OSTEOLOGICAL FEATURES OF THE ENDEMIC BALKAN MARBLED TROUT, *SALMO MARMORATUS* CUV. (SALMONIDAE). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):113-121. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR]

92-002342 Ekstrom, Peter and Hilmar Meissl. ELECTRON MICROSCOPIC ANALYSIS OF S-ANTIGEN- AND SEROTONIN-IMMUNOREACTIVE NEURAL AND SENSORY ELEMENTS IN THE PHOTOSENSORY PINEAL ORGAN OF THE SALMON. *J. Comp. Neurol.* 292(1):73-82. 1990. FR 37(2)
[Dep. Zool., Univ. Lund, S-223 62 Lund, Sweden]

92-002343 Emel'yanova, N. G. and A. P. Makeyeva. MORPHOLOGY OF THE GAMETES OF THE CHANNEL CATFISH, *ICTALURUS PUNCTATUS. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):10-16. 1991. FR 37(2)
[Biol. Fac., Moscow State Univ., Moscow, USSR]

92-002344 Fedorov, V. V. and B. A. Sheyko. SECOND FINDING OF *ANDRIASHEVIA APTERA* (ZOARCIDAE) OFF THE COAST OF JAPAN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):99-101. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR]

92-002345 Findeis, E. K. ONTOGENY AND HOMOLOGY OF THE "MAXILLA" OF STURGEONS: EVOLUTION OF MOBILE JAW ELEMENTS IN EARLY ACTINOPTERYGIAN FISHES. *Am. Zool.* 31(5):8A. 1991. Abstract only. FR 37(2)
[Univ. Mass., Amherst] *Scaphirhynchus, Acipenser, Polyodon,* and *Polypterus.*

92-002346 Fishelson, L. COMPARATIVE GONAD MORPHOLOGY AND SEXUALITY OF THE MURAENIDAE (PISCES, TELEOSTEI). *Copeia* 1992(1):197-209. 1992. FR 37(2)
[Dep. Zool., Fac. Life Sci., Tel Aviv Univ., Tel Aviv, Israel]

92-002347 Futey, Lidia M. and Miles M. Coburn. ONTOGENY OF THE WEBERIAN APPARATUS OF THE CYPRINID FISH *LUXILUS CORNUTUS. Ohio J. Sci.* 92(2):9. 1992. Abstract only. FR 37(2)
[Dep. Biol., John Carroll Univ., University Heights, OH 44118]

92-002348 Garavello, Julio C.; Sergio F. dos Reis and Richard E. Strauss. DISCRIMINATION AND BODY FORM VARIATION IN THREE SPECIES OF *LEPORINUS* SPIX FROM RIO META, COLOMBIA (OSTARIOPHYSI: ANOSTOMIDAE). *Zool. Anz.* 227(1/2):93-97. 1991. FR 37(2)
[Dep. Cienc. Biol., Univ. Fed. Sao Carlos, Sao Carlos, SP 13 560, Brazil] *Leporinus boehlkei, L. friderici* and *L. muyscorum.*

92-002349 Golovan, G. A.; N. P. Pakhorukov and V. B. Tkhorikov. MORPHOECOLOGICAL CHARACTERIZATION OF ROSEFISH, *HELICOLENUS LENGERICHI* (SCORPAENIDAE) FROM THE NASCA RIDGE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):117-128. 1991. FR 37(2)
[Sevastopol. Exp.-Construction Bur. Underwater Studies, Inst. Evol. Morphol. & Anim. Ecol., USSR Acad. Sci., Moscow, USSR]

92-002350 Gomahr, Andreas; Margit Palzenberger and Kurt Kotrschal. DENSITY AND DISTRIBUTION OF EXTERNAL TASTE BUDS IN CYPRINIDS. *Environ. Biol. Fishes* 33(1-2):125-134. 1992. FR 37(2)
[Zool. Inst. Univ. Salzburg, Hellbrunnerstr. 34, A-5020 Salzburg, Austria] Data for 10 species.

92-002351 Grover, Donald A. and Seymour Zigman. FUNDUSCOPIC MORPHOLOGY OF THE LIGHT- AND DARK-ADAPTED EYE OF THE TOADFISH *(OPSANUS TAU) IN VIVO. Can. J. Zool.* 69(9):2498-2500. 1991. In English with French summ. FR 37(2)
[Dep. Ophthalmol., Ophthalmol. Res. Lab. (Box 314), Univ. Rochester School Med. & Dentistry, 601 Elmwood Ave., Rochester, NY 14642]

92-002352 Harrison, Ian J. and Gordon J. Howes. THE PHARYNGOBRANCHIAL ORGAN OF MUGILID FISHES; ITS STRUCTURE, VARIABILITY, ONTOGENY, POSSIBLE FUNCTION AND TAXONOMIC UTILITY. *Bull. Br. Mus. (Nat. Hist.) Zool. Ser.* 57(2):111-132. 1991. FR 37(2)
[Mus. Royal Afrique Cent., B-3080 Tervuren, Belgium]

92-002353 Honkanen, Tapio and Peter Ekstrom. AN IMMUNOCYTOCHEMICAL STUDY OF THE OLFACTORY PROJECTIONS IN THE THREE-SPINED STICKLEBACK, *GASTEROSTEUS ACULEATUS,* L. *J. Comp. Neurol.* 292(1):65-72. 1990. FR 37(2)
[Dep. Zool., Univ. Lund, S-223 62 Lund, Sweden]

92-002354 Hossain, A. M. and H. M. Dutta. ASSESSMENT OF STRUCTURAL AND FUNCTIONAL SIMILARITIES AND DIFFERENCES AMONG THE CAECA OF BLUEGILL FISH. *Am. Zool.* 31(5):97A. 1991. Abstract only. FR 37(2)
[Med. Coll. Ga., Augusta 30912] *Lepomis macrochirus.*

MORPHOLOGY (Continued)

92-002355 Howes, G. J. and Ayanomiya Fumihito. CRANIAL ANATOMY AND PHYLOGENY OF THE SOUTH-EAST ASIAN CATFISH GENUS *BELODONTICHTHYS*. *Bull. Br. Mus. (Nat. Hist.) Zool. Ser.* 57(2):133-160. 1991. FR 37(2)
[Dep. Zool., Nat. Hist. Mus., London SW7 5BD, England] *B. dinema.*

92-002356 Huber, Robert and Michael K. Rylander. BRAIN MORPHOLOGY AND TURBIDITY PREFERENCE IN *NOTROPIS* AND RELATED GENERA (CYPRINIDAE, TELEOSTEI). *Environ. Biol. Fishes* 33(1-2):153-165. 1992. FR 37(2)
[Dep. Biol. Sci., Tex. Tech Univ., Lubbock 79409] Data for 51 species.

92-002357 Johnson, G. David. MONOPHYLY OF THE EUTELEOSTEAN CLADES - NEOTELEOSTEI, EURYPTERYGII, AND CTENOSQUAMATA. *Copeia* 1992(1):8-25. 1992. FR 37(2)
[Div. Fishes, Natl. Mus. Nat. Hist., Smithsonian Inst., Washington, DC 20560]

92-002358 Johnston, Carol Eileen. THE TAXONOMIC STATUS OF *SEMOTILUS THOREAUIANUS* JORDAN, 1877 (PISCES: CYPRINIDAE) IN ALABAMA AND NEIGHBORING STATES. *M.S. thesis, Auburn Univ.* 75p. 1986. FR 37(2)
S. atromaculatus.

92-002359 Kisia, S. M. and G. M. Hughes. RED MUSCLE FIBRE AND CAPILLARY DIMENSIONS IN DIFFERENT SIZES OF A TILAPIA, *OREOCHROMIS NILOTICUS* (TREWAVAS). *J. Fish Biol.* 40(1):97-106. 1992. FR 37(2)
[Hughes: Res. Unit Comp. Anim. Respiration, Bristol Univ., Bristol BS8 1UG, England]

92-002360 Korovina, V. M.; A. V. Neyelov and Ye. P. Bondarenko. THE ANATOMY AND HISTOLOGY OF THE INTESTINE OF THE PATAGONIAN TOOTHFISH (*DISSOSTICHUS ELEGINOIDES* SMITT). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):34-40. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., State Res. Inst., Lake & River Fish., Leningrad, USSR]

92-002361 Kotlyar, A. N. OSTEOLOGY OF *HISPIDOBERYX AMBAGIOSUS* (HISPIDOBERYCIDAE) AND ITS POSITION WITHIN THE BERYCIFORMES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):99-108. 1991. FR 37(2)
[Inst. Oceanol., Acad. Sci., Moscow, USSR]

92-002362 Kotrschal, Kurt and Margit Palzenberger. NEUROECOLOGY OF CYPRINIDS: COMPARATIVE, QUANTITATIVE HISTOLOGY REVEALS DIVERSE BRAIN PATTERNS. *Environ. Biol. Fishes* 33(1-2):135-152. 1992. FR 37(2)
[Konrad-Lorenz-Forschungsstelle Ethol., Auingerhof 11, A-4645 Grunau, Germany]

92-002363 Krejsa, R. J.; H. C. Slavkin and P. Bringas, Jr. HAGFISH POKAL CELLS ARE AMELOBLASTS: ARE CONODONTS THE FIRST VERTEBRATE MINERALIZED TISSUES? *Am. Zool.* 31(5):47A. 1991. Abstract only. FR 37(2)
[Cal Poly State Univ., San Luis Obispo, CA] *Eptatretus stouti.*

92-002364 Lecomte-Finiger, R. THE CRYSTALLINE ULTRASTRUCTURE OF OTOLITHS OF THE EEL (*A. ANGUILLA* L. 1758). *J. Fish Biol.* 40(2):181-190. 1992. FR 37(2)
[Univ. Perpignan, Lab. Biol. Mar., 52 Ave. Villeneuve, 66860 Perpignan Cedex, France]

92-002365 Leung, T. C. and J. P. Wourms. GASTRULATION OF THE PADDLEFISH, *POLYODON*. *Am. Zool.* 31(5):81A. 1991. Abstract only. FR 37(2)
[Clemson Univ., Clemson, SC] *P. spathula.*

92-002366 Liem, K. F. FUNCTIONAL AND PROGRAMMATIC TRANSFORMATIONS IN THE ONTOGENY OF THE HYOBRANCHIUM AND PHARYNGEAL JAWS OF LABROID FISHES. *Am. Zool.* 31(5):45A. 1991. Abstract only. FR 37(2)
[Harvard Univ., Cambridge, MA]

92-002367 Lombarte, A. and A. Castellon. INTERSPECIFIC AND INTRASPECIFIC OTOLITH VARIABILITY IN THE GENUS *MERLUCCIUS* AS DETERMINED BY IMAGE ANALYSIS. *Can. J. Zool.* 69(9):2442-2449. 1991. In English with French summ. FR37(2)
[Inst. Cienc. Mar, Consejo Superior Invest. Cient., Passeig Nac. s/n, 08039 Barcelona, Catalonia, Spain] *M. bilinearis, M. capensis, M. gayi, M. merluccius, M. paradoxus,* and *M. productus.*

92-002368 Long, W. L. and J. P. Wourms. GASTRULATION IN THE GAR, *LEPISOSTEUS OSSEUS*. *Am. Zool.* 31(5):81A. 1991. Abstract only. FR 37(2)
[West. Md. Coll., Westminster]

92-002369 Maksimova, Ye. G. STRUCTURAL FEATURES OF THE EGGS OF THE ARCTIC GRAYLING, *THYMALLUS ARCTICUS*, DURING VITELLOGENESIS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):113-119. 1991. FR 37(2)
[Inst. Mar. Biol., Far East Div., USSR Acad. Sci., Vladivostok, USSR]

MORPHOLOGY (Continued)

92-002370 Maric, Drago. [CONTRIBUTION TO THE KNOWLEDGE OF TAXONOMICAL CHARACTERISTICS OF THE GENUS *SALVELINUS* RICHARDSON, 1836 (PISCES) SPECIES FROM MONTENEGRO.] *Ichthyos* No. 10. p. 18–24. 1991. In Serbo-Croatian with English summ. FR 37(2)

S. alpinus and *S. fontinalis* in Yugoslavia.

92-002371 Marra, Luciano E.; John H. Youson; David G. Butler; Henry G. Friesen and Graham F. Wagner. STANNIOCALCIN-LIKE IMMUNOREACTIVITY IN THE CORPUSCLES OF STANNIUS OF THE BOWFIN *AMIA CALVA* L. *Cell Tissue Res.* 267(2):283–290. 1992. FR 37(2)

[Youson: Div. Life Sci., Scarborough Campus, Univ. Toronto, West Hill, ON, Canada M1C 1A4]

92-002372 McDowall, Bob. WHY THE BLUEGILLED BULLY HAS A BLUE GILL. *Freshwater Catch* No. 46. p. 7–8. 1991. FR 37(2)

Gobiomorphus cotidianus.

92-002373 Miller, Peter J. THE SPERM DUCT GLAND: A VISCERAL SYNAPOMORPHY FOR GOBIOID FISHES. *Copeia* 1992(1):253–256. 1992. FR 37(2)

[Zool. Dep., The Univ., Bristol BS8 1UG, England] *Rhyacichthys aspro.*

92-002374 Miyake, T.; A. Huysseune; B. K. Hall and M. M. Smith. DEVELOPMENT OF A CAM-GRAFTING SYSTEM FOR SKELETAL TISSUES OF FISHES. *Am. Zool.* 31(5):47A. 1991. Abstract only. FR 37(2)

[Dalhousie Univ., Halifax, NS, Canada] *Oryzias latipes, Brachydanio rerio,* and *Tilapia nilotica.*

92-002375 Munk, Ole. ACCESSORY ESCAL GLAND (AEG) IN SOME DEEP-SEA ANGLERFISHES. *Acta Zool. (Stockh.)* 73(1):33–37. 1992. FR 37(2)

[Inst. Cell Biol. & Anat., Zool. Inst., Univ. Copenhagen, Universitetsparken 15, DK-2100 Copenhagen, Denmark] *Ceratias holboelli, C. uranoscopus, C. tentaculatus* and *Phyllorhinichthys micractis.*

92-002376 Peterson, R. H.; J. Power and D. J. Martin-Robichaud. MORPHOLOGICAL BASIS OF THE PECTORAL FIN FLUTTER OF EMBRYONIC ATLANTIC SALMON (*SALMO SALAR*). *Can. J. Fish. Aquat. Sci.* 48(11):2223–2227. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, Aquacult. & Invertebr. Fish. Div., Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

92-002377 Piken, Harry. THE BRILLIANTLY YELLOW ALBINO PEACOCK. *Trop. Fish Hobbyist* 40(1):42, 44–46. 1991. FR 37(2)

Aulonocara.

92-002378 Pinchuk, V. P. SPECIES GROUPINGS IN THE GENUS *NEOGOBIUS* (PERCIFORMES). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):1–15. 1991. FR 37(2)

[Black Sea State Biosphere Sanctuary, USSR Acad. Sci., Golaya Pristan, Kherson Oblast, USSR] *N. bathybius, N. fluviatilis,* and *N. melanostomus.*

92-002379 Puzdrowski, R. L. and R. B. Leonard. VARIATIONS IN CEREBELLAR MORPHOLOGY OF THE ATLANTIC STINGRAY, *D. SABINA. Am. Zool.* 31(5):34A. 1991. Abstract only. FR 37(2)

[Mar. Biomed. Inst., Univ. Tex. Med. Bur., Galveston]

92-002380 Rasotto, Maria Berica. GONADAL DIFFERENTIATION AND THE MODE OF SEXUALITY IN *COBITIS TAENIA* (TELEOSTEI; COBITIDAE). *Copeia* 1992(1):223–228. 1992. FR 37(2)

[Dip. Biol., Univ. Padova, Via Trieste 75, 35131 Padova, Italy]

92-002381 Riehl, Rudiger and Robert A. Patzner. BREEDING, EGG STRUCTURE AND LARVAL MORPHOLOGY OF THE CATFISH *STURISOMA AUREUM* (STEINDACHNER) (TELEOSTEI, LORICARIIDAE). *J. Aquaricult. Aquat. Sci.* 6(1):1–6. 1991. FR 37(2)

[Zool. Inst. Univ. Dusseldorf, Morphol. & Zellbiol., Universitatsstr. 1, D-4000 Dusseldorf, Germany]

92-002382 Robertson, John C. and Terence M. Bradley. LIVER ULTRASTRUCTURE OF JUVENILE ATLANTIC SALMON *(SALMO SALAR). J. Morphol.* 211(1):41–54. 1992. FR 37(2)

[Bradley: Dep. Fish., Anim. & Vet. Sci., Univ. R.I., Kingston 02881]

92-002383 Sabates, Ana. LARVAL DEVELOPMENT OF *LEPIDORHOMBUS BOSCII* (RISSO, 1810) (PLEURONECTIFORMES) IN THE NORTHWESTERN MEDITERRANEAN. *Sci. Mar.* 55(3):543–546. 1991. In English with Spanish summ. FR 37(2)

[Inst. Cienc. Mar., Passeig Nac. s/n, 08039 Barcelona, Spain]

92-002384 Salmanov, A. V.; N. S. Rostova and Ye. A. Dorofeyeva. MORPHOMETRIC FEATURES OF THE AMU DARYA TROUT (*SALMO TRUTTA OXIANUS*, SALMONIDAE). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):58–78. 1991. FR 37(2)

[Zool. Inst., USSR Acad. Sci., Leningrad State Univ., Leningrad, USSR]

MORPHOLOGY (Continued)

92-002385 Sanger, Alexandra M. QUANTITATIVE FINE STRUCTURAL DIVERSIFICATION OF RED AND WHITE MUSCLE FIBRES IN CYPRINIDS. *Environ. Biol. Fishes* 33(1-2):97-104. 1992. FR 37(2)
[Inst. Zool., Univ. Salzburg, Hellbrunnerstr. 34, 5020 Salzburg, Austria]

92-002386 Schaefer, Kurt M. AN EVALUATION OF GEOGRAPHIC AND ANNUAL VARIATION IN MORPHOMETRIC CHARACTERS AND GILL-RAKER COUNTS OF YELLOWFIN TUNA, *THUNNUS ALBACARES,* FROM THE PACIFIC OCEAN. *Inter-Am. Trop. Tuna Comm. Bull.* 20(3):135-163. 1992. In English and Spanish. FR 37(2)
[Inter-Am. Trop. Tuna Comm., Scripps Inst. Oceanogr., La Jolla, CA]

92-002387 Schwartz, Frank J. A SECOND RECORD OF A UROGENITAL SINUS UROLITH IN THE SAND TIGER SHARK *(ODONTASPIS TAURUS). Northeast Gulf Sci.* 12(1):73-74. 1991. FR 37(2)
[Inst. Mar. Sci., Univ. N.C., Morehead City 28557]

92-002388 Shardo, J. D. DEVELOPMENT OF THE AMERICAN SHAD, *ALOSA SAPIDISSIMA. Am. Zool.* 31(5):35A. 1991. Abstract only. FR 37(2)
[Univ. Mass., Amherst]

92-002389 Shed'ko, S. V. ON THE CLASSIFICATION OF THE KAMCHATKA TROUT, *SALMO MYKISS* (SALMONIFORMES, SALMONIDAE): RESTRICTION ENDONUCLEASE ANALYSIS OF MITOCHONDRIAL DNA. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):107-112. 1991. FR 37(2)
[Inst. Soil Biol., USSR Acad. Sci., Far East Sci. Cent., Vladivostok, USSR] *Oncorhynchus mykiss* in the USSR.

92-002390 Silva, Alexandra. HISTOMORPHOLOGY OF THE DIGESTIVE SYSTEM OF SARDINE *SARDINA PILCHARDUS* LARVAE. *Port. Zool.* 1(5):37-41. 1990. In English with Portuguese summ. FR 37(2)
[Inst. Nac. Invest. Pescas, Av. Brasilia, Alges-Praia, P-1400 Lisbon, Portugal]

92-002391 Trinkaus, J. P.; Madeleine Trinkaus and Rachel D. Fink. ON THE CONVERGENT CELL MOVEMENTS OF GASTRULATION IN *FUNDULUS. J. Exp. Zool.* 261(1):40-61. 1992. FR 37(2)
[Dep. Biol., Yale Univ., New Haven, CT 06511] *F. heteroclitus.*

92-002392 Tsuneki, Kazuhiko. A SYSTEMATIC SURVEY OF THE OCCURRENCE OF THE HYPOTHALAMIC SACCUS VASCULOSUS IN TELEOST FISH. *Acta Zool. (Stockh.)* 73(1):67-77. 1992. FR 37(2)
[Dep. Biol., Coll. Gen. Educ., Osaka Univ., Toyonaka, Osaka, 560, Japan]

92-002393 Uchiyama, Hiroyuki. IMMUNOHISTOCHEMICAL SUBPOPULATIONS OF RETINOPETAL NEURONS IN THE NUCLEUS OLFACTORETINALIS IN A TELEOST, THE WHITESPOTTED GREENLING (*HEXAGRAMMOS STELLERI*). *J. Comp. Neurol.* 293(1):54-62. 1990. FR 37(2)
[Inst. Sensory Res., Syracuse Univ., Merrill Ln., Syracuse, NY 13244-5290]

92-002394 Utter, Paula Sue. A TAXONOMIC REVIEW OF THE DARTERS REFERRED TO *ETHEOSTOMA SWAINI* AND *E. DITREMA* (PISCES: PERCIDAE) IN THE COOSA-ALABAMA RIVER DRAINAGE. *M.S. thesis, Auburn Univ.* 129p. 1984. FR 37(2)

92-002395 van den Berg, Coen; Ferdinand A. Sibbing; Jan W. M. Osse and Wim Hoogenboezem. STRUCTURE, DEVELOPMENT AND FUNCTION OF THE BRANCHIAL SIEVE OF THE COMMON BREAM, *ABRAMIS BRAMA,* WHITE BREAM, *BLICCA BJOERKNA* AND ROACH, *RUTILUS RUTILUS. Environ. Biol. Fishes* 33(1-2):105-124. 1992. FR 37(2)
[Dep. Exp. Anim. Morphol. & Cell Biol., Agric. Univ., Marijkeweg 40, 6709 PG Wageningen, Netherlands]

92-002396 van Winkoop, A.; G. H. R. Booms; G. J. Dulos and L. P. M. Timmermans. ULTRASTRUCTURAL CHANGES IN PRIMORDIAL GERM CELLS DURING EARLY GONADAL DEVELOPMENT OF THE COMMON CARP (*CYPRINUS CARPIO* L., TELEOSTEI). *Cell Tissue Res.* 267(2):337-346. 1992. FR 37(2)
[Timmermans: Dep. Exp. Anim. Morphol. & Cell Biol., Agric. Univ., Marijkeweg 40, NL-6709 PG Wageningen, Netherlands]

92-002397 Voskoboynikova, O. S. COMPARATIVE OSTEOLOGY OF DRAGONFISHES OF THE SUBFAMILY GYMNODRACONINAE (BATHYDRACONIDAE). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):24-33. 1991. FR 37(2)
[Zool. Inst., USSR Acad. Sci., Leningrad, USSR] *Gymnodraco acuticeps* and *Psilodraco breviceps.*

92-002398 Wang, D. S.; Y. G. Zhang and Q. S. Luo. OBSERVATIONS ON THE LARVAL DEVELOPMENT OF *MYSTUS MACROPTERUS* (BLEEKER): BAGRIDAE. *J. Fish Biol.* 40(3):371-379. 1992. FR 37(2)
[Biol. Dep., Southwest China Teachers' Univ., 630715 Beibei, Chongqing, Sichuan Province, China]

92-002399 Wright, D. B. EVOLUTION OF SEXUAL DIMORPHISM IN THE LIGHT OF PHYLOGENETIC EVIDENCE. *Am. Zool.* 31(5):63A. 1991. Abstract only. FR 37(2)
[Univ. Wash., Seattle]

MORPHOLOGY (Continued)

92-002400 Wu, E. H. JAW PROTRUSION IN THE SPOTTED WOBBEGONG, *ORECTOLOBUS MACULATUS*. *Am. Zool.* 31(5):97A. 1991. Abstract only. FR 37(2)

[Harvard Univ., Cambridge, MA]

92-002401 Zhang, Z. and N. W. Runham. OTOLITH MICROSTRUCTURE PATTERN IN *OREOCHROMIS NILOTICUS* (L.). *J. Fish Biol.* 40(3):325-332. 1992. FR 37(2)

[Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

PHYSIOLOGY

92-002402 Abe, Hiroki and Emiko Okuma. EFFECT OF TEMPERATURE ON THE BUFFERING CAPACITIES OF HISTIDINE-RELATED COMPOUNDS AND FISH SKELETAL MUSCLE. *Nippon Suisan Gakkaishi* 57(11):2101-2107. 1991. In English with Japanese summ. FR 37(2)

[Dep. Food & Nutr. Sci., Kyoritsu Women's Univ., Motohachioji, Hachioji, Tokyo 193, Japan] *Oncorhynchus mykiss, Liopsetta obscura, Cyprinus carpio, Euthynnus pelamis,* and *Anguilla japonica.*

92-002403 Abe, Hiroki and Emiko Okuma. RIGOR-MORTIS PROGRESS OF CARP ACCLIMATED TO DIFFERENT WATER TEMPERATURES. *Nippon Suisan Gakkaishi* 57(11):2095-2100. 1991. In English with Japanese summ. FR 37(2)

[Dep. Food & Nutr. Sci., Kyoritsu Women's Univ., Motohachioji, Hachioji, Tokyo 193, Japan] *Cyprinus carpio.*

92-002404 Abe, Hiroki. INTERORGAN TRANSPORT AND CATABOLISM OF CARNOSINE AND ANSERINE IN RAINBOW TROUT. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(4):717-720. 1991. FR 37(2)

[Dep. Food & Nutr. Sci., Kyoritsu Women's Univ., Motohachioji, Hachioji, Tokyo 193, Japan] *Oncorhynchus mykiss.*

92-002405 Abrami, G.; F. Natiello; P. Bronzi; D. McKenzie; L. Bolis and E. Agradi. A COMPARISON OF HIGHLY UNSATURATED FATTY ACID LEVELS IN WILD AND FARMED EELS (*ANGUILLA ANGUILLA*). *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):79-81. 1992. FR 37(2)

[Ist. Sci. Farmacol., via Balzaretti, 9, Milan, 20133, Italy]

92-002406 Alvarino, J. M. R.; S. Zanuy; F. Prat; M. Carrillo and E. Mananos. STIMULATION OF OVULATION AND STEROID SECRETION BY LHRHa INJECTION IN THE SEA BASS (*DICENTRARCHUS LABRAX*): EFFECT OF TIME OF DAY. *Aquaculture* 102(1/2):177-186. 1992. FR 37(2)

[Dep. Prod. Anim., Escuela Ingenieros Agron., 28040 Madrid, Spain]

92-002407 Amano, Masafumi; Yoshitaka Oka; Katsumi Aida; Naoto Okumoto; Seiichiro Kawashima and Yoshihisa Hasegawa. IMMUNOCYTOCHEMICAL DEMONSTRATION OF SALMON GnRH AND CHICKEN GnRH-II IN THE BRAIN OF MASU SALMON, *ONCORHYNCHUS MASOU*. *J. Comp. Neurol.* 314(3):587-597. 1991. FR 37(2)

[Aida: Dep. Fish., Fac. Agric., Univ. Tokyo, Bunkyo, Tokyo 113, Japan]

92-002408 Anderson, Douglas P.; Tadaaki Moritomo and Ricardo de Grooth. NEUTROPHIL, GLASS-ADHERENT, NITROBLUE TETRAZOLIUM ASSAY GIVES EARLY INDICATION OF IMMUNIZATION EFFECTIVENESS IN RAINBOW TROUT. *Vet. Immunol. Immunopathol.* 30(4):419-429. 1992. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish Health Res. Lab., Box 700, Kearneysville, WV 25430] *Oncorhynchus mykiss.*

92-002409 Aristizabal Abud, E. O. EFFECTS OF SALINITY AND WEIGHT ON ROUTINE METABOLISM IN THE JUVENILE CROAKER, *MICROPOGONIAS FURNIERI* (DESMAREST 1823). *J. Fish Biol.* 40(3):471-472. 1992. FR 37(2)

[Fac. Cienc. Exactas & Nat., Univ. Nac. Mar del Plata, Funes 3350, 7600 Mar de Plata, Argentina]

92-002410 Astier, Catherine; Jean-Pierre Labbe; Claude Roustan and Yves Benyamin. SARCOMERIC DISORGANIZATION IN POST-MORTEM FISH MUSCLES. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(3):459-465. 1991. FR 37(2)

[Benyamin: Cent. Rech. Biochim. Macromol. (C.N.R.S.), LP 8402, Unite 249 (I.N.S.E.R.M.), Lab. Biochim. & Ecol. Invertebr. Marins (E.P.H.E.), Univ. Montpellier I, B.P. 5051, F-34033 Montpellier Cedex, France] *Sardina pilchardus, Sparus auratus,* and *Dicentrarchus labrax.*

92-002411 Azzarello, Marie Y. SOME QUESTIONS CONCERNING THE SYNGNATHIDAE BROOD POUCH. *Bull. Mar. Sci.* 49(3):741-747. 1991. FR 37(2)

[Allegheny Coll., Dep. Biol., Meadville, PA 16335] *Syngnathus scovelli.*

92-002412 Balakhnin, I. A. and V. I. Luk'yanenko. ACTIVATING NON-SPECIFIC PROTECTION FACTORS IN FISH WITH CARBOHYDRATES. *Dokl. Biol. Sci. (Engl. Transl. Dokl. Akad. Nauk SSSR)* 318(1-6):331-332. 1991. FR 37(2)

[I. I. Shmal'gauzen Inst. Zool., Kiev, USSR]

PHYSIOLOGY (Continued)

92-002413 Ballantyne, J. S.; M. E. Chamberlin and T. D. Singer. OXIDATIVE METABOLISM IN THERMOGENIC TISSUES OF THE SWORDFISH AND MAKO SHARK. *J. Exp. Zool.* 261(1):110-114. 1992. FR 37(2)
[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Xiphias gladius* and *Isurus oxyrinchus.*

92-002414 Ballantyne, J. S.; T. M. John; T. D. Singer and O. V. Oommen. SHORT-TERM EFFECTS OF TRIIODOTHYRONINE ON THE BOWFIN, *AMIA CALVA* (HOLOSTEI), AND THE LAKE CHAR, *SALVELINUS NAMAYCUSH* (TELEOSTEI). *J. Exp. Zool.* 261(1):105-109. 1992. FR 37(2)
[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002415 Barry, Terence P.; Terrence B. Kayes; Jeffrey A. Malison and Clyde H. Amundson. VALIDATION OF A HIGHLY SENSITIVE MICROPLATE ENZYMELINKED IMMUNOASSAY (ELISA) FOR MEASURING SERUM CORTISOL IN FISH, AND A COMPARISON OF PRIMARY PHYSIOLOGICAL STRESS RESPONSES IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) AND LAKE TROUT (*SALVELINUS NAMAYCUSH*). *J. World Aquacult. Soc.* 22(3):14A-15A. 1991. Abstract only. FR 37(2)
[Aquacult. Program, Univ. Wis., Madison 53706]

92-002416 Beccaria, C.; J. P. Diaz and R. Connes. EFFECTS OF DIETARY CONDITIONS ON THE EXOCRINE PANCREAS OF THE SEA BASS, *DICENTRARCHUS LABRAX*L. (TELEOSTEI). *Aquaculture* 101(1/2):163-176. 1992. FR 37(2)
[Connes: Lab. Biol. Anim., U.S.T.L., Pl. Eugene Bataillon, 34095 Montpellier Cedex 5, France]

92-002417 Benetti, Daniel D. RESPIRATION AND DOLPHIN'S (*CORYPHAENA HIPPURUS*) AQUACULTURE. *J. World Aquacult. Soc.* 22(3):15A. 1991. Abstract only. FR 37(2)
[Div. Mar. Biol. & Fish., Rosenstiel School Mar. & Atmos. Sci., Univ. Miami, Miami, FL 33149]

92-002418 Benfey, Tillmann J. HEPATIC ORNITHINE DECARBOXYLASE ACTIVITY DURING SHORT-TERM STARVATION AND REFEEDING IN BROOK TROUT, *SALVELINUS FONTINALIS.* *Aquaculture* 102(1/2):105-113. 1992. FR 37(2)
[Dep. Biol., Univ. New Brunswick, Bag Serv. No. 45111, Fredericton, NB, Canada, E3B 6E1]

92-002419 Berglund, I.; I. Mayer and B. Borg. EFFECTS OF SEXUAL MATURATION, CASTRATION, AND ANDROGEN IMPLANTS ON GROWTH IN ONE- AND TWO-YEAR-OLD PARR IN A BALTIC ATLANTIC SALMON (*SALMO SALAR* L.) STOCK. *J. Fish Biol.* 40(2):281-292. 1992. FR 37(2)
[Dep. Aquacult., Swedish Univ. Agric. Sci., S-901 83 Umea, Sweden]

92-002420 Bern, Howard A. and Steffen S. Madsen. A SELECTIVE SURVEY OF THE ENDOCRINE SYSTEM OF THE RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) WITH EMPHASIS ON THE HORMONAL REGULATION OF ION BALANCE. *Aquaculture* 100(1-3):237-262. 1992. FR 37(2)
[Dep. Integrative Biol., Cancer Res. Lab., & Bodega Mar. Lab., Univ. Calif., Berkeley 94720]

92-002421 Billard, R. REPRODUCTION IN RAINBOW TROUT: SEX DIFFERENTIATION, DYNAMICS OF GAMETOGENESIS, BIOLOGY AND PRESERVATION OF GAMETES. *Aquaculture* 100(1-3):263-298. 1992. FR 37(2)
[Lab. Ichtyol. Gen. & Appl., Mus. Natl. Hist. Nat., 43 rue Cuvier, F-75231 Paris Cedex 05, France] *Oncorhynchus mykiss.*

92-002422 Billard, Roland and Marie Paule Cosson. SOME PROBLEMS RELATED TO THE ASSESSMENT OF SPERM MOTILITY IN FRESHWATER FISH. *J. Exp. Zool.* 261(2):122-131. 1992. FR 37(2)
[Lab. Ichtyol., Mus. Natl. Hist. Nat., 75231 Paris Cedex 05, France] *Cyprinus carpio* and *Oncorhynchus mykiss.*

92-002423 Biswas, J. and A. K. Pati. INFLUENCE OF THYROID HORMONES ON MUSCLE TISSUE RESPIRATION IN HYPOGEAN AND EPIGEAN POPULATIONS OF LOACH *OREONECTUS EVEZARDI. Indian J. Exp. Biol.* 29(10):933-936. 1991. FR 37(2)
[Pati: Dep. Biosci., Ravishankar Univ., Raipur-492 010, India]

92-002424 Blaugrund, E.; S. Sharma and M. Schwartz. L1 IMMUNOREACTIVITY IN THE DEVELOPING FISH VISUAL SYSTEM. *Brain Res.* 574(1/2):244-250. 1992. FR 37(2)
[Schwartz: Dep. Neurobiol., Weizmann Inst. Sci., 76100 Rehovot, Israel] *Carassius auratus.*

92-002425 Blythe, William G. INDUCED MATURATION AND SPAWNING OF STRIPED BASS, *MORONE SAXATILIS,* EXPOSED TO 6-,9-, AND 12-MONTH PHOTOTHERMAL REGIMES. *M.S. thesis, Va. Polytech. Inst. & State Univ.* 167p. 1992. FR 37(2)

92-002426 Boccignone, M.; G. B. Palmegiano and C. Sarra. [INFLUENCE OF DIETARY FATTY ACIDS ON PUFA PATTERN OF FARMED AND WILD FISH.] *Atti Soc. Ital. Sci. Vet.* Vol. 42. p. 567-569. 1988. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 429-430. 1988-1990. FR 37(2)
Salmo trutta and *Anguilla anguilla.*

PHYSIOLOGY (Continued)

92-002427 Boggs, Christofer H. BIOENERGETICS AND GROWTH OF NORTHERN ANCHOVY *ENGRAULIS MORDAX*. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):555-566. 1991. FR 37(2)
[Honolulu Lab., Southwest Fish. Sci. Cent., NMFS, NOAA, 2570 Dole St., Honolulu, HI 96822-2396]

92-002428 Borski, Russell J. DISPARATE REGULATION OF GROWTH HORMONE AND THE TWO PROLACTINS OF THE TILAPIA, *OREOCHROMIS MOSSAMBICUS*, IN RESPONSE TO SALINITY. *Pac. Sci.* 46(1):91-92. 1992. Abstract only. FR 37(2)
[Inst. Mar. Biol., Kaneohe, HI 96744]

92-002429 Bowser, P. R.; G. A. Wooster; J. Stleger and J. G. Babish. PHARMACOKINETICS OF ENROFLOXACIN IN FINGERLING RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *J. Vet. Pharmacol. Ther.* 15(1):62-71. 1992. FR 37(2)
[Babish: Dep. Pharmacol., NYS Coll. Vet. Med., Cornell Univ., Ithaca, NY 14853]

92-002430 Burka, John F.; Lisa M. Purcell and Gregory A. Mitton. CONTRACTILE MECHANISMS OF RAINBOW TROUT INTESTINES: TRANSMURALLY STIMULATED CONTRACTIONS. *Aquaculture* 100(1-3):321. 1992. Abstract only. FR 37(2)
[Dep. Anat. & Physiol., Atl. Vet. Coll., Charlottetown, PI, Canada] *Oncorhynchus mykiss.*

92-002431 Callard, Gloria V. AUTOCRINE AND PARACRINE ROLE OF STEROIDS DURING SPERMATOGENESIS: STUDIES IN *SQUALUS ACANTHIAS* AND *NECTURUS MACULOSUS*. *J. Exp. Zool.* 261(2):132-142. 1992. FR 37(2)
[Dep. Biol., Boston Univ., Boston, MA 02215]

92-002432 Calvo, J.; E. Morriconi; G. A. Rae and N. A. San Roman. EVIDENCE OF PROTANDRY IN A SUBANTARCTIC NOTOTHENID, *ELEGINOPS MACLOVINUS* (CUV. & VAL., 1830) FROM THE BEAGLE CHANNEL, ARGENTINA. *J. Fish Biol.* 40(2):157-164. 1992. FR 37(2)
[Cent. Austral Invest. Cient. (CONICET) CC92. (9410) Ushuaia, Tierra del Fuego, Argentina]

92-002433 Carrillo, Manuel; Silvia Zanuy and Eduard R. Kuhn. SEASONAL CHANGES IN THYROID ACTIVITY OF MALE SEA BASS (*DICENTRARCHUS LABRAX* LINNAEUS 1758) (PERCIFORMES: SERRANIDAE) ADAPTED TO DIFFERENT SALINITIES. *Sci. Mar.* 55(3):491-496. 1991. In English with Spanish summ. FR 37(2)
[Inst. Acuicult. Torre Sal (C.S.I.C.), Ribera Cabanes, 12595 Torre Sal, Castellon, Spain]

92-002434 Carter, C. G.; D. F. Houlihan and I. D. McCarthy. FEED UTILIZATION EFFICIENCIES OF ATLANTIC SALMON (*SALMO SALAR* L.) PARR: EFFECT OF A SINGLE SUPPLEMENTARY ENZYME. *Comp. Biochem. Physiol. A Comp. Physiol.* 101(2):369-374. 1992. FR 37(2)
[Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, Scotland]

92-002435 Cech, Joseph J., Jr.; Robert G. Schwab; William C. Coles and Brent B. Bridges. MOSQUITOFISH REPRODUCTION: EFFECTS OF PHOTOPERIOD AND NUTRITION. *Aquaculture* 101(3/4):361-369. 1992. FR 37(2)
[Dep. Wildl. & Fish. Biol., Univ. Calif., Davis 95616] *Gambusia affinis.*

92-002436 Chang, Ching-Fong; Hung-Jen Hu; Hung-Chi Tang and Lian-Tien Sun. STIMULATION OF OVULATION IN AYU, *PLECOGLOSSUS ALTIVELIS*, BY TREATMENT WITH ANTIESTROGENS AND LUTEINIZING HORMONE-RELEASING HORMONE ANALOG. *Aquaculture* 101(3/4):329-336. 1992. FR 37(2)
[Dep. Aquacult., Natl. Taiwan Ocean Univ., Keelung 20224, Taiwan]

92-002437 Chavez de Martinez, M. C. and R. H. Richards. HISTOPATHOLOGY OF VITAMIN C DEFICIENCY IN A CICHLID, *CICHLASOMA UROPHTHALMUS* (GUNTHER). *J. Fish Dis.* 14(5):507-519. 1991. FR 37(2)
[Inst. Cienc. Mar & Limnol., U.N.A.M., Est. Mazatlan, Apdo. Postal 811, C.P. 82240, Mazatlan, Sinaloa, Mexico]

92-002438 Chou, Kuo-Chen. ENERGY-OPTIMIZED STRUCTURE OF ANTIFREEZE PROTEIN AND ITS BINDING MECHANISM. *J. Mol. Biol.* 223(2):509-517. 1992. FR 37(2)
[Computational Chem., Upjohn Res. Lab., Kalamazoo, MI 49001] *Pleuronectes americanus.*

92-002439 Choubert, Georges; Joel de la Noue and Rene Lesel. EFFECTS OF DIETARY FAT LEVELS AND OF ANTIBIOTICS (FLUMEQUINE + GENTAMYCIN) ON NUTRIENT DIGESTIBILITY IN RAINBOW TROUT, *ONCORHYNCHUS MYKISS* (WALBAUM). *Aquat. Living Resour.* 4(3):147-153. 1991. In English with French summ. FR 37(2)
[Lab. Nutr. Poissons, Stn. Hydrobiol., INRA, 64310 Saint-Pee-sur-Nivelle, France]

92-002440 Christiansen, Jorgen Schou; Helge Kreutzer Johnsen and Malcolm Jobling. THE COMBINED EFFECTS OF AMBIENT TEMPERATURE AND ENFORCED SUSTAINED SWIMMING ACTIVITY ON BODY TEMPERATURES OF ARCTIC CHARR (*SALVELINUS ALPINUS* L.). *J. Therm. Biol.* 16(6):351-355. 1991. FR 37(2)
[Norwegian Coll. Fish. Sci., Univ. Tromso, N-9000 Tromso, Norway]

PHYSIOLOGY (Continued)

92-002441 Chung, K. S.; M. Nircho; G. J. Holt and C. R. Arnold. NUCLEIC ACIDS IN RED AND WHITE MUSCLE OF JUVENILE RED DRUM, *SCIAENOPS OCELLATUS*. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 31. 1988. English and Spanish abstract only. FR 37(2)
[Inst. Oceanogr., Univ. Oriente, Cumana, Venezuela]

92-002442 Claireaux, Guy and Jean-Denis Dutil. PHYSIOLOGICAL RESPONSE OF THE ATLANTIC COD (*GADUS MORHUA*) TO HYPOXIA AT VARIOUS ENVIRONMENTAL SALINITIES. *J. Exp. Biol.* Vol. 163. p. 97-118. 1992. FR 37(2)
[Dep. Biol., Dalhousie Univ., Halifax, NS, Canada B3H 4J1]

92-002443 Cochran, Roger C. *IN VIVO* AND *IN VITRO* EVIDENCE FOR THE ROLE OF HORMONES IN FISH SPERMATOGENESIS. *J. Exp. Zool.* 261(2):143-150. 1992. FR 37(2)
[Med. Toxicol. Branch, Dep. Pesticide Regulation, Sacramento, CA 95814] *Fundulus heteroclitus.*

92-002444 Conlon, J. Michael; Finbarr O'Harte; D. David Smith; Richard J. Balment and Neil Hazon. PURIFICATION AND CHARACTERIZATION OF UROTENSIN II AND PARVALBUMIN FROM AN ELASMOBRANCH FISH, *SCYLIORHINUS CANICULA* (COMMON DOGFISH). *Neuroendocrinology* 55(2):230-235. 1992. FR 37(2)
[Dep. Biomed. Sci., Creighton Univ. School Med., Omaha, NE 68178]

92-002445 Counselman, Clarence James. OXYGEN CONSUMPTION OF THE BLUEGILL BREAM, *LEPOMIS MACROCHIRUS* RAFINESQUE, AT VARIOUS TEMPERATURES. *M.S. thesis, Auburn Univ.* 54p. 1953. FR 37(2)

92-002446 Cowley, Darrin J. and Mark A. Sheridan. INSULIN AND GLUCAGON REGULATE HEPATIC LIPID BIOSYNTHESIS IN RAINBOW TROUT. *Am. Zool.* 31(5):55A. 1991. Abstract only. FR 37(2)
[N.D. State Univ., Fargo 58105] *Oncorhynchus mykiss.*

92-002447 Culbreath, Lieneke; S. L. Smith and S. D. Obenauf. ALTERNATIVE COMPLEMENT PATHWAY ACTIVITY IN NURSE SHARK SERUM. *Am. Zool.* 31(5):131A. 1991. Abstract only. FR 37(2)
[Fla. Int. Univ. & Southeast. Univ., Health Sci., Miami] *Ginglymostoma cirratum.*

92-002448 Dabrowski, K. ASCORBATE CONCENTRATION IN FISH ONTOGENY. *J. Fish Biol.* 40(2):273-279. 1992. FR 37(2)
[Ohio State Univ., School Nat. Resour., 2021 Coffey Rd., Columbus 43210] *Rutilus rutilus, Coregonus lavaretus* and *Salvelinus alpinus.*

92-002449 Davidson, G. A.; A. E. Ellis and C. J. Secombes. CELLULAR RESPONSES OF LEUCOCYTES ISOLATED FROM THE GUT OF RAINBOW TROUT, *ONCORHYNCHUS MYKISS* (WALBAUM). *J. Fish Dis.* 14(6):651-659. 1991. FR 37(2)
[Secombes: Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, Scotland]

92-002450 Davies, Briony; Clive F. Randall and Niall R. Bromage. ABSOLUTE DAYLENGTH AND THE ENTRAINMENT OF AN ENDOGENOUS CLOCK CONTROLLING REPRODUCTION IN THE FEMALE RAINBOW TROUT. *Aquaculture* 100(1-3):321-322. 1992. Abstract only. FR 37(2)
[Inst. Aquacult., Univ. Stirling, Stirling, Scotland] *Oncorhynchus mykiss.*

92-002451 Degani, Gad and Rachel Boker. SENSITIVITY TO MATURATION- INDUCING STEROIDS AND GONADOTROPIN IN THE OOCYTES OF BLUE GOURAMI *TRICHOGASTER TRICHOPTERUS* (ANABANTIDAE, PALLAS, 1770). *Gen. Comp. Endocrinol.* 85(3):430-439. 1992. FR 37(2)
[Migal-Galilee Technol. Cent., Kiryat Shmona 10200, Israel]

92-002452 DeVries, S. H. and E. A. Schwartz. HEMI-GAP-JUNCTION CHANNELS IN SOLITARY HORIZONTAL CELLS OF THE CATFISH RETINA. *J. Physiol. (Camb.)* Vol. 445. p. 201-230. 1992. FR 37(2)
[Dep. Neurobiol., Stanford Univ., Fairchild D-238, Stanford, CA 94305] *Ictalurus punctatus.*

92-002453 Dewar, H.; J. B. Graham and R. W. Brill. PHYSIOLOGICAL THERMOREGULATION IN THE YELLOWFIN TUNA, *THUNNUS ALBACARES*. *Am. Zool.* 31(5):41A. 1991. Abstract only. FR 37(2)
[Scripps Inst. Oceanogr., La Jolla, CA]

92-002454 Divakaran, S.; S. Ramanathan and Anthony C. Ostrowski. INVESTIGATIONS ON THE ENDOGENOUS PRODUCTION OF TAURINE IN MAHIMAHI (*CORYPHAENA HIPPURUS*). *J. World Aquacult. Soc.* 22(3):22A. 1991. Abstract only. FR 37(2)
[Oceanic Inst., Makapuu Point, P.O. Box 25280, Honolulu, HI 96825]

92-002455 Djamgoz, M. B. A.; S. P. Fraser; M. G. Darlison and E. A. Barnard. AMINO ACID NEUROTRANSMITTER RECEPTOR EXPRESSION IN *XENOPUS* OOCYTES BY INJECTION OF MESSENGER RIBONUCLEIC ACID EXTRACTED FROM VERTEBRATE (*RUTILUS RUTILUS*) RETINA. *J. Physiol. (Camb.)* Vol. 446. p. 531. 1992. FR 37(2)
[Neurobiol. Group, Dep. Biol., Imperial Coll. Sci., Technol. & Med., London SW7 2BB, England]

PHYSIOLOGY (Continued)

92-002456 Douglas, R. H. and A. Thorpe. SHORT-WAVE ABSORBING PIGMENTS IN THE OCULAR LENSES OF DEEP-SEA TELEOSTS. *J. Mar. Biol. Assoc. U.K.* 72(1):93-112. 1992. FR 37(2)
[Appl. Vision Res. Cent., Dep. Optometry & Visual Sci., City Univ., 311-321 Goswell Rd., London EC1V 7DD, England] *Argyropelecus sladeni, A. affinis,* and *Malacosteus niger.*

92-002457 Dove, S.; J. Horwitz and M. McFall-Ngai. CONVERGENCE IN THE PHOTOPHORE AND EYE LENSES OF THE MIDSHIPMAN FISH. *Am. Zool.* 31(5):96A. 1991. Abstract only. FR 37(2)
[Univ. South. Calif., Los Angeles 90089-0371] *Porichthys notatus.*

92-002458 Down, N. E. (Ted) and E. M. Donaldson. PROSPECTS FOR GROWTH ACCELERATION IN SALMONIDS UTILIZING BIOLOGICALLY ACTIVE PROTEINS AND PEPTIDES. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1831. p. 141-152. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Oceans, West Vancouver Lab., 4160 Marine Dr., West Vancouver, BC, Canada V7V 1N6]

92-002459 Drot, Stephane; Francois Leiffrig; Alain Lamproye; Alain Poncin; Stephane Lebecque; Claude Denis; Xavier Cogels; Andre Renard and Jean Smal. EFFECT OF RECOMBINANT TROUT GROWTH HORMONE ON RAINBOW TROUT AT GROWTH-INHIBITING TEMPERATURES. *Aquaculture* 100(1-3):322-323. 1992. Abstract only. FR 37(2)
[Ful, B6900 Mirwart, Belgium] *Oncorhynchus mykiss.*

92-002460 Duguay, S. J.; L. K. Park; M. Samadpour and W. W. Dickhoff. DISTRIBUTION & EXPRESSION OF SALMON INSULIN-LIKE GROWTH FACTOR I mRNA: EVIDENCE FOR THREE IGF-I PROHORMONES. *Am. Zool.* 31(5):22A. 1991. Abstract only. FR 37(2)
[Univ. Wash., Seattle] *Oncorhynchus kisutch.*

92-002461 Dunne, J. B. and J. C. Rankin. EFFECTS OF ATRIAL NATRIURETIC PEPTIDE AND ANGIOTENSIN II ON SALT AND WATER EXCRETION BY THE PERFUSED RAINBOW TROUT KIDNEY. *J. Physiol. (Camb.)* Vol. 446. p. 92. 1992. FR 37(2)
[Inst. Biol., Odense Univ., DK-5230 Odense M, Denmark] *Oncorhynchus mykiss.*

92-002462 Dyubin, V. P.; I. A. Barannikova and S. G. Kiseleva. FUNCTIONAL BASES OF EURYHALINITY IN THE INCONNU DURING EARLY ONTOGENY. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):130-140. 1991. FR 37(2)
[Biol. Fac., Leningrad State Univ., Leningrad, USSR] *Stenodus leucichthys.*

92-002463 Eilertson, C. D.; N. M. Carneiro and M. A. Sheridan. EFFECTS OF GALANIN, CHOLECYSTOKININ, AND NEUROPEPTIDE-Y ON PANCREATIC SOMATOSTATIN RELEASE FROM CULTURED ISLETS. *Am. Zool.* 31(5):55A. 1991. Abstract only. FR 37(2)
[N.D. State Univ., Fargo 58105] *Oncorhynchus mykiss.*

92-002464 El Naggar, Gamal O. and Richard T. Lovell. EFFECT OF SOURCE AND DIETARY CONCENTRATION OF ASCORBIC ACID ON TISSUE CONCENTRATIONS OF ASCORBIC ACID IN CHANNEL CATFISH. *J. World Aquacult. Soc.* 22(4):201-206. 1991. FR 37(2)
[Lovell: Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849] *Ictalurus punctatus.*

92-002465 Estay, Francisco Javier. MORPHOLOGICAL, HISTOCHEMICAL AND CHROMATOGRAPHIC CHANGES RELATED TO OVER-RIPENING IN RAINBOW TROUT EGGS. *Aquaculture* 100(1-3):323. 1992. Abstract only. FR 37(2)
[Dep. Cienc. Ecol., Fac. Cienc., Univ. Chile, Santiago, Chile] *Oncorhynchus mykiss.*

92-002466 Farrell, A. P.; J. A. Johansen and R. K. Suarez. EFFECTS OF EXERCISE-TRAINING ON CARDIAC PERFORMANCE AND MUSCLE ENZYMES IN RAINBOW TROUT, *ONCORHYNCHUS MYKISS. Fish Physiol. Biochem.* 9(4):303-312. 1991. FR 37(2)
[Dep. Biol. Sci., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6]

92-002467 Fauconneau, B.; Anne Basseres and S. J. Kaushik. OXIDATION OF PHENYLALANINE AND THREONINE IN RESPONSE TO DIETARY ARGININE SUPPLY IN RAINBOW TROUT (*SALMO GAIRDNERI* R.). *Comp. Biochem. Physiol. A Comp. Physiol.* 101(2):395-401. 1992. FR 37(2)
[Fish Physiol. Unit, INRA Campus Beaulieu, 35042 Rennes Cedex, France]

92-002468 Fitzgerald, J. P. COMPARATIVE ANALYSIS OF SUPEROXIDE DISMUTASE ACTIVITIES IN A RANGE OF TEMPERATE AND TROPICAL TELEOST FISH. *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):111-114. 1992. FR 37(2)
[Dunstaffnage Mar. Lab., P.O. Box 3, Oban, Argyll PA34 4AD, Scotland] *Pleuronectes platessa, Salmo salar, S. trutta, Tilapia nilotica, T. mossambica* and *T. hornorum.*

92-002469 Francis, Richard C. SEXUAL LABILITY IN TELEOSTS: DEVELOPMENTAL FACTORS. *Q. Rev. Biol.* 67(1):1-18. 1992. FR 37(2)
[Dep. Psychol., Stanford Univ., Stanford, CA 94305]

PHYSIOLOGY (Continued)

92-002470 Friedman, David L. and Robert Roberts. PURIFICATION AND LOCALIZATION OF BRAIN-TYPE CREATINE KINASE IN SODIUM CHLORIDE TRANSPORTING EPITHELIA OF THE SPINY DOGFISH, *SQUALUS ACANTHIAS*. *J. Biol. Chem.* 267(6):4270-4276. 1992. FR 37(2)
[Dep. Med., Mol. Cardiol. Unit, Baylor Coll. Med., One Baylor Plaza, Rm. 506C, Houston, TX 77030]

92-002471 From, Jon I. and Gorm V. H. Rasmussen. RELATIONSHIP BETWEEN GROWTH AND INITIAL WEIGHT OF EGGS AND FISH OF RAINBOW TROUT. *Aquaculture* 100(1-3):324. 1992. Abstract only. FR 37(2)
[Danish Trout Culture Res. Stn., DK-6780 Skaerbaek, Denmark] *Oncorhynchus mykiss.*

92-002472 Fujioka, Yasuhiro; Takashi Katoh; Shozo Fushiki and Heisuke Nakagawa. CHANGES IN FATTY ACID COMPOSITION ASSOCIATED WITH BODY SILVERING IN BIWA SALMON *ONCORHYNCHUS RHODURUS* AND AMAGO SALMON *O. RHODURUS*. *Nippon Suisan Gakkaishi* 57(12):2313-2320. 1991. In English with Japanese summ. FR 37(2)
[Shiga Prefectural Samegai Trout Farm, Kaminyu, Maihara, Sakata, Shiga 521-01, Japan]

92-002473 Fynn-Aikins, Franklyn Kofi. CARBOHYDRATE UTILIZATION IN THE JUVENILE WHITE STURGEON (*ACIPENSER TRANSMONTANUS*). *Ph.D. dissertation, Univ. Calif. (Davis)* 97p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(6):2833. 1991. Oder No. DA9125098. FR 37(2)

92-002474 Gallagher, M. L.; M. L. Harrell and R. A. Rulifson. VARIATION IN LIPID AND FATTY ACID CONTENTS OF ATLANTIC CROAKERS, STRIPED MULLET, AND SUMMER FLOUNDER. *Trans. Am. Fish. Soc.* 120(5):614-619. 1991. FR 37(2)
[E. Carolina Univ., Greenville, NC 27858-4353] *Micropogonias undulatus, Mugil cephalus,* and *Paralichthys dentatus* in North Carolina.

92-002475 Gallardo, M. A.; J. Planas and J. Sanchez. *L*-SERINE UPTAKE BY TROUT (*SALMO TRUTTA*) RED BLOOD CELLS: THE EFFECT OF ISOPROTERENOL. *J. Exp. Biol.* Vol. 163. p. 85-95. 1992. FR 37(2)
[Sanchez: Dep. Bioquim. & Fisiol., Unit Fishiol., Fac. Biol., Diagonal 645, 08028-Barcelona, Spain]

92-002476 Gamperl, A. Kurt and E. Don Stevens. SPRINT-TRAINING EFFECTS ON TROUT (*ONCORHYNCHUS MYKISS*) WHITE MUSCLE STRUCTURE. *Can. J. Zool.* 69(11):2786-2790. 1991. In English with French summ. FR 37(2)
[Dep. Biol., Dalhousie Univ., Halifax, NS, Canada B3H 4J1]

92-002477 Gannon, A. T. OXYGEN UPTAKE DURING DEVELOPMENT OF SKATES, *RAJA ERINACEA*. *Am. Zool.* 31(5):75A. 1991. Abstract only. FR 37(2)
[Univ. Nev., Las Vegas]

92-002478 Garcia, L. Ma. B. LUNAR SYNCHRONIZATION OF SPAWNING IN SEA BASS, *LATES CALCARIFER* (BLOCH): EFFECT OF LUTEINIZING HORMONE-RELEASING HORMONE ANALOGUE (LHRHa) TREATMENT. *J. Fish Biol.* 40(3):359-370. 1992. FR 37(2)
[Aquacult. Dep., SEAFDEC, Tigbauan, Iloilo, Philippines]

92-002479 Gelman, A.; U. Cogan and S. Mokady. THE THERMAL PROPERTIES OF FISH ENZYMES AS A POSSIBLE INDICATOR OF THE TERMPERATURE ADAPTATION POTENTIAL OF THE FISH. *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):205-208. 1992. FR 37(2)
[Fish. Prod. Lab., Kimron Vet. Inst., P.O. Box 699, Haifa 31000, Israel] *Epinephelus guaza, Tilapia nilotica, Hypophthalmichthys molitrix, T. simonis simonis* and *T. zilli* in Israel.

92-002480 Glubokov, Alexander I.; Ekaterina V. Mikodina; Richard Vachta; Jan Kouril; Marina A. Sedova; Jitka Hamackova and Vladimir A. Navolotsky. STIMULATION OF MATURATION IN RAINBOW TROUT FEMALES BY METOCLOPRAMIDE, A DOPAMINE RECEPTOR ANTAGONIST, AND BY LHRH ANALOGUE. *Aquaculture* 100(1-3):324-325. 1992. Abstract only. FR 37(2)
[Inst. Mar. Fish. & Oceanogr., V. Krasnosolskaya, Moscow 107140, USSR] *Oncorhynchus mykiss.*

92-002481 Goksoyr, Anders and Havard E. Larsen. THE CYTOCHROME P450 SYSTEM OF ATLANTIC SALMON *(SALMO SALAR)*: I. BASAL PROPERTIES AND INDUCTION OF P450 1A1 IN LIVER OF IMMATURE AND MATURE FISH. *Fish Physiol. Biochem.* 9(4):339-349. 1991. FR 37(2)
[Lab. Mar. Mol. Biol., Univ. Bergen, N-5020 Bergen, Norway]

92-002482 Gonzalez, Richard J. and D. G. McDonald. THE RELATIONSHIP BETWEEN OXYGEN CONSUMPTION AND ION LOSS IN A FRESHWATER FISH. *J. Exp. Biol.* Vol. 163. p. 317-332. 1992. FR 37(2)
[Dep. Organismal Biol. & Anat., Univ. Chicago, 1025 E. 57th St., Chicago, IL 60637] *Oncorhynchus mykiss.*

92-002483 Graham, J. B.; N. C. Lai; D. Chiller and J. L. Roberts. MECHANO- AND CHEMORECEPTOR CONTROL OF HEART RATE IN THE AIR-BREATING FISH *MONOPTERUS*. *Am. Zool.* 31(5):58A. 1991. Abstract only. FR 37(2)
[Scripps Inst. Oceanogr., Univ. Calif., San Diego, La Jolla] *Synbranchus.*

PHYSIOLOGY (Continued)

92-002484 Grande, Magne and Sigbjorn Andersen. CRITICAL THERMAL MAXIMA FOR YOUNG SALMONIDS. *J. Freshwater Ecol.* 6(3):275-279. 1991. FR 37(2)

[Norwegian Inst. Water Res., P.O. Box 69 Korsvoll, N-0808 Oslo 8, Norway] *Salvelinus namaycush, S. fontinalis, Salmo trutta* and *Oncorhynchus mykiss.*

92-002485 Grove, David J. and Susanne Holmgren. MECHANISMS CONTROLLING STOMACH VOLUME OF THE ATLANTIC COD (*GADUS MORHUA*) FOLLOWING GASTRIC DISTENSION. *J. Exp. Biol.* Vol. 163. p. 49-63. 1992. FR 37(2)

[Holmgren: Comp. Neurosci. Unit, Dep. Zoophysiol., Univ. Goteborg, Box 250 59, S-400 31 Goteborg, Sweden]

92-002486 Grove, David J. and Susanne Holmgren. INTRINSIC MECHANISMS CONTROLLING CARDIAC STOMACH VOLUME OF THE RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) FOLLOWING GASTRIC DISTENSION. *J. Exp. Biol.* Vol. 163. p. 33-48. 1992. FR 37(2)

[Holmgren: Comp. Neurosci. Unit, Dep. Zoophysiol., Univ. Goteborg, Box 250 59, S-400 31 Goteborg, Sweden]

92-002487 Gusev, G. P.; A. O. Sherstobitov and I. A. Skulskii. POTASSIUM TRANSPORT IN LAMPREY (*LAMPETRA FLUVIATILIS*) ERYTHROCYTES: EVIDENCE FOR K^+ CHANNELS. *Comp. Biochem. Physiol. A Comp. Physiol.* 101(3):569-572. 1992. FR 37(2)

[Inst. Evol. Physiol. & Biochem., Acad. Sci. USSR, Leningrad 194223, USSR]

92-002488 Gustaveson, A. Wayne; Richard S. Wydoski and Gary A. Wedemeyer. PHYSIOLOGICAL RESPONSE OF LARGEMOUTH BASS TO ANGLING STRESS. *Trans. Am. Fish. Soc.* 120(5):629-636. 1991. FR 37(2)

[Utah Div. Wildl. Resour., 336 Birch St., Page, AZ 86040] *Micropterus salmoides* in Utah.

92-002489 Gutierrez, Joaquim; Torbjorn Asgard; Elena Fabbri and Erika M. Plisetskaya. INSULIN-RECEPTOR BINDING IN SKELETAL MUSCLE OF TROUT. *Fish Physiol. Biochem.* 9(4):351-360. 1991. FR 37(2)

[Dep. Bioquim & Fisiol., Fac. Biol., Univ. Barcelona, 08028 Barcelona, Spain] *Oncorhynchus mykiss.*

92-002490 Gutierrez, Joaquim and Erika M. Plisetskaya. INSULIN BINDING TO LIVER PLASMA MEMBRANES IN SALMONIDS WITH MODIFIED PLASMA INSULIN LEVELS. *Can. J. Zool.* 69(11):2745-2750. 1991. In English with French summ. FR 37(2)

[Dep. Biochem. & Physiol., Univ. Barcelona, 08028 Barcelona, Spain] *Oncorhynchus kisutch* and *O. mykiss.*

92-002491 Hanssen, R. G. J. M.; N. Mayer-Gostan; G. Flik and S. E. Wendelaar Bonga. INFLUENCE OF AMBIENT CALCIUM LEVELS ON STANNIOCALCIN SECRETION IN THE EUROPEAN EEL (*ANGUILLA ANGUILLA*). *J. Exp. Biol.* Vol. 162. p. 197-208. 1992. FR 37(2)

[Dep. Anim. Physiol., Fac. Sci., Univ. Nijmegen, Toernooiveld 25, 6525 ED Nijmegen, Netherlands]

92-002492 Harmon, J. S. and M. A. Sheridan. GLUCOSE-STIMULATED LIPOLYSIS IN RAINBOW TROUT, *ONCORHYNCHUS MYKISS*, LIVER. *Am. Zool.* 31(5):116A. 1991. Abstract only. FR 37(2)

[N.D. State Univ., Fargo 58105]

92-002493 Harmon, Jamie S.; Kim G. Michelsen and Mark A. Sheridan. PURIFICATION AND CHARACTERIZATION OF HEPATIC TRIACYLGLYCEROL LIPASE ISOLATED FROM RAINBOW TROUT, *ONCORHYNCHUS MYKISS. Fish Physiol. Biochem.* 9(4):361-368. 1991. FR 37(2)

[Sheridan: Dep. Zool., N.D. State Univ., Fargo 58105]

92-002494 Hart, N. H. and K. A. Becker. ACTIN AT THE SPERM ENTRY SITE OF THE ZEBRAFISH EGG. *Am. Zool.* 31(5):80A. 1991. Abstract only. FR 37(2)

[Rutgers Univ., New Brunswick, NJ] *Brachydanio rerio.*

92-002495 Haverly, J. E.; M. Betka and G. V. Callard. STAGE-DEPENDENCY OF GELATINOLYTIC PROTEINASE ACTIVITIES DURING SPERMATOGENESIS. *Am. Zool.* 31(5):67A. 1991. Abstract only. FR 37(2)

[Boston Univ., Boston, MA] *Squalus.*

92-002496 Haygood, Margo G.; Daniel L. Distel and Peter J. Herring. POLYMERASE CHAIN REACTION AND 16S rRNA GENE SEQUENCES FROM THE LUMINOUS BACTERIAL SYMBIONTS OF TWO DEEP-SEA ANGLERFISHES. *J. Mar. Biol. Assoc. U.K.* 72(1):149-159. 1992. FR 37(2)

[Mar. Biol. Res. Div., Scripps Inst. Oceanogr., Univ. Calif., San Diego, La Jolla 92093] *Melanocetus johnsoni* and *Cryptopsaras couesi.*

92-002497 Hedrick, M. S. and S. L. Katz. A MODEL OF AERIAL VENTILATION IN AN AIR-BREATHING FISH (*AMIA CALVA*). *Am. Zool.* 31(5):68A. 1991. Abstract only. FR 37(2)

[Univ. British Columbia, Vancouver, BC, Canada]

PHYSIOLOGY (Continued)

92-002498 Henderson, R. James; Mary F. Tatner and Wenhui Lin. ANTIBODY PRODUCTION IN RELATION TO LIPID COMPOSITION IN RAINBOW TROUT FED DIETS OF DIFFERENT (*n*-3) POLYUNSATURATED FATTY ACID CONTENT. *Aquaculture* 100(1-3):232. 1992. Abstract only. FR 37(2)

[N.E.R.C., Unit Aquat. Biochem., School Nat. Sci., Univ. Stirling, Stirling, Scotland] *Oncorhynchus mykiss.*

92-002499 Herbinger, C. M. and G. W. Friars. EFFECTS OF WINTER TEMPERATURE AND FEEDING REGIME ON THE RATE OF EARLY MATURATION IN ATLANTIC SALMON (*SALMO SALAR*) MALE PARR. *Aquaculture* 101(1/2):147-162. 1992. FR 37(2)

[Mar. Gene Probe Lab., Dep. Biol., Dalhousie Univ., Halifax, NS, Canada B3H 4J1]

92-002500 Herring, Peter J. BIOLUMINESCENCE OF THE OCEANIC APOGONID FISHES *HOWELLA BRODIEI* AND *FLORENCIELLA LUGUBRIS*. *J. Mar. Biol. Assoc. U.K.* 72(1):139-148. 1992. FR 37(2)

[Inst. Oceanogr. Sci. Deacon Lab., Wormley, Godalming, Surrey GU8 5UB, England]

92-002501 Hlavova, V.; P. Jurajda and D. Pravda. [YEARLY CHANGES IN THE WHITE BLOOD PICTURE OF TROUT *SALMO TRUTTA* AND GRAYLING *THYMALLUS THYMALLUS*.] *Zivoc. Vyr.* 34(10):949-958. 1989. In Czech with English, German, and Russian summ. From Agric. Lit. Czech. No. 3-4. p. 957. 1990. FR 37(2)

92-002502 Home, H.; P. Rosenblum and T. Brandt. CAN DIET INFLUENCE OVARIAN STEROIDOGENESIS IN LARGEMOUTH BASS, *MICROPTERUS SALMOIDES*? *Am. Zool.* 31(5):40A. 1991. Abstract only. FR 37(2)

[Southwest Tex. State Univ., San Marcos]

92-002503 Hopkins, C. L. A RELATIONSHIP BETWEEN ADULT RECOVERIES OF CHINOOK SALMON (*ONCORHYNCHUS TSHAWYTSCHA*) AND LUNAR PHASE AT TIME OF THEIR RELEASE FROM A HATCHERY ON THE RAKAIA RIVER, NEW ZEALAND. *Aquaculture* 101(3/4):305-315. 1992. FR 37(2)

[New Zealand Minist. Agric. & Fish., Freshwater Fish. Cent., P.O. Box 8324, Riccarton, Christchurch, New Zealand]

92-002504 Horimoto, Katsuhisa; Hiromi Suzuki and Jinya Otsuka. DISCRIMINATION BETWEEN ADAPTIVE AND NEUTRAL AMINO ACID SUBSTITUTIONS IN VERTEBRATE HEMOGLOBINS. *J. Mol. Evol.* 31(4):302-324. 1990. FR 37(2)

[Otsuka: Dep. Appl. Biol. Sci., Fac. Sci. & Technol., Sci. Univ. Tokyo, Noda 278, Japan]

92-002505 Houston, Arthur H. and A. Murad. ERYTHRODYNAMICS IN GOLDFISH, *CARASSIUS AURATUS* L: TEMPERATURE EFFECTS. *Physiol. Zool.* 65(1):55-76. 1992. FR 37(2)

[Dep. Biol. Sci., Brock Univ., Saint Catharines, ON, Canada L2S 3A1]

92-002506 Howerton, R. D.; D. K. Okimoto and E. G. Grau. THE EFFECT OF ORALLY ADMINISTERED 17α-METHYLTESTOSTERONE AND 3, 3'-TRIIODO-L-THYRONINE ON GROWTH OF SEAWATER-ADAPTED TILAPIA, *OREOCHROMIS MOSSAMBICUS* (PETERS). *Aquacult. Fish. Manage.* 23(1):123-128. 1992. FR 37(2)

[Grau: Inst. Mar. Biol., P.O. Box 1346, Kaneohe, HI 96744]

92-002507 Hristovski, D. N.; K. S. Trajkovska; A. S. Dzhekova-Stojkova; M. D. Ristov; V. Stefanovski and J. J. Bogdanska-Duma. ATP IN BLOOD OF RAINBOW TROUT DETERMINED BY FIREFLY BIOLUMINISCENT ASSAY. *Aquaculture* 100(1-3):325. 1992. Abstract only. FR 37(2)

[Agric. Coll., Univ. Bitola, Bitola, Yugoslavia] *Oncorhynchus mykiss.*

92-002508 Hustveit, Helge; Rune Engevik and Jan Petter Lindsetmo. OSMOREGULATION IN RAINBOW TROUT EXPOSED TO DIFFERENT PHOTOPERIOD REGIMES. *Aquaculture* 100(1-3):326. 1992. Abstract only. FR 37(2)

[Sogn Fjordane Coll., N-5801 Sogndal, Norway] *Oncorhynchus mykiss.*

92-002509 Igumnova, L. V. and V. I. Dubynin. DURATION OF RIPENESS OF FEMALES OF THE PERSIDSKIY OSETR, *ACIPENSER PERSICUS*, OF THE VOLGA SPAWNING POPULATION, AFTER HYPOPHYSIN INJECTION, AT VARIOUS TEMPERATURES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):128-133. 1991. FR 37(2)

[Caspian Res. Inst. Fish. (KaspNIRKh), Astrakhan, USSR]

92-002510 Jackson, Leslie F.; Ronald G. Hodson and Craig V. Sullivan. HORMONAL CORRELATES OF GAMETOGENESIS IN WHITE PERCH, *MORONE AMERICANA*. *Am. Zool.* 31(5):11A. 1991. Abstract only. FR 37(2)

[N.C. State Univ., Raleigh]

92-002511 Jansen, W. A. and W. C. Mackay. BODY COMPOSITION AND REPRODUCTIVE INVESTMENT OF STUNTED YELLOW PERCH, *PERCA FLAVESCENS*. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2356-2361. 1989. FR 37(2)

[Dep. Zool., Univ. Alberta, Edmonton, AB, Canada T6G 2E9]

PHYSIOLOGY (Continued)

92-002512 Jayaram, Muthanna G. and Frederick W. H. Beamish. DIETARY PROTEIN-LIPID INTERACTION ON AMINOACID METABOLISM IN LAKE TROUT, *SALVELINUS NAMAYCUSH*. *J. World Aquacult. Soc.* 22(3):31A. 1991. Abstract only. FR 37(2)
[Zool. Dep., Univ. Guelph, Guelph, ON, Canada]

92-002513 Jenkins, J. A. and D. D. Ourth. ISOLATION OF CHANNEL CATFISH COMPLEMENT COMPONENT C3. *Am. Zool.* 31(5):118A. 1991. Abstract only. FR 37(2)
[Memphis State Univ., Memphis, TN] *Ictalurus punctatus.*

92-002514 Jobin, Richard M. and John P. Chang. DIFFERENCES IN EXTRACELLULAR CALCIUM INVOLVEMENT MEDIATING THE SECRETION OF GONADOTROPIN AND GROWTH HORMONE STIMULATED BY TWO CLOSELY RELATED ENDOGENOUS GnRH PEPTIDES IN GOLDFISH PITUITARY CELLS. *Neuroendocrinology* 55(2):156-166. 1992. FR 37(2)
[Dep. Zool., Univ. Alberta, Edmonton, AB, Canada T6G 2E9] *Carassius auratus.*

92-002515 Kane, Donald A. ZEBRAFISH MIDBLASTULA TRANSITION: THE ONSET OF ZYGOTIC CONTROL DURING DEVELOPMENT. *Ph.D. dissertation, Univ. Oreg.* 189p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4577. 1992. Order No. DA9205817. FR 37(2)
Pterois volitans.

92-002516 Karamanos, N. K.; A. Manouras; D. Politou; P. Gritsoni and T. Tsegenidis. ISOLATION AND HIGH-PERFORMANCE LIQUID CHROMATOGRAPHIC ANALYSIS OF RAY *(RAJA CLAVATA)* SKIN GLYCOSAMINOGLYCANS. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(4):827-832. 1991. FR 37(2)
[Tsegenidis: Sect. Organic Chem., Biochem. & Nat. Products, Dep. Chem., Univ. Patras, Patras, Greece]

92-002517 Kawai, Yuji and Haruo Shinano. EMULSIFYING ABILITY OF SOLUBLE FRACTION IN HEAT-TREATED SARCOPLASMIC PROTEINS OF CARP MUSCLE. *Nippon Suisan Gakkaishi* 57(12):2339. 1991. In English with Japanese summ. FR 37(2)
[Lab. Mar. Food Technol., Fac. Fish., Hokkaido Univ., Minato, Hakodate, Hokkaido 041, Japan] *Cyprinus carpio.*

92-002518 Kawatsu, Hiroshi; Tomoaki Yamazaki and Eiji Miyamori. *IN VITRO* HEMOLYSIS AND METHEMOGLOBIN FORMATION IN COMMON CARP ERYTHROCYTES INDUCED BY HYDROGEN PEROXIDE AND HYPOXANTHINE-XANTHINE OXIDASE. *Nippon Suisan Gakkaishi* 57(12):2299-2305. 1991. In English with Japanese summ. FR 37(2)
[Dep. Fish., Fac. Agric., Miyazaki Univ., Gakuen-Kibanadai, Miyazaki 889-21, Japan] *Cyprinus carpio.*

92-002519 Keckeis, Hubert and Fritz Schiemer. FOOD CONSUMPTION AND GROWTH OF LARVAE AND JUVENILES OF THREE CYPRINID SPECIES AT DIFFERENT FOOD LEVELS. *Environ. Biol. Fishes* 33(1-2):33-45. 1992. FR 37(2)
[Inst. Zool., Dep. Limnol., Althanstr. 14, A-1090 Vienna, Austria] *Abramis ballerus, Alburnus alburnus,* and *Rutilus rutilus.*

92-002520 Keller, Clifford H.; Leonard Maler and Walter Heiligenberg. STRUCTURAL AND FUNCTIONAL ORGANIZATION OF A DIENCEPHALIC SENSORY-MOTOR INTERFACE IN THE GYMNOTIFORM FISH, *EIGENMANNIA*. *J. Comp. Neurol.* 293(3):347-376. 1990. FR 37(2)
[Scripps Inst. Oceanogr., Univ. Calif. San Diego, La Jolla 92093]

92-002521 Kellner, Ronald G. and Glen Van der Kraak. MULTIFACTORIAL REGULATION OF PROSTAGLANDIN SYNTHESIS IN PREOVULATORY GOLDFISH OVARIAN FOLLICLES. *Biol. Reprod.* 46(4):630-635. 1992. FR 37(2)
[Van der Kraak: Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Carassius auratus.*

92-002522 Kestemont, Par P.; I. Van Driessche and Ch. Melard. STUDY OF THE REPRODUCTIVE CYCLE OF THE GUDGEON, *GOBIO GOBIO* L. 3. MATURATION OF GONADS UNDER OVULATORY AND SUB-OVULATORY TEMPERATURE REGIMES. *J. Appl. Ichthyol.*7(4):205-216. 1991. In French with English and German summ. FR 37(2)
[Unite Ecol. Eaux Douces, Fac. Univ. N.D. Paix, rue Bruxelles, 61, B-5000 Namur, Belgium]

92-002523 Kim, Sung Zoo; Kyung Woo Cho; Suhn Hee Kim; Hoon Ryu; Yun Ha Hwang and Geum Yeong Lee. IDENTIFICATION OF IMMUNOREACTIVE ATRIAL NATRIURETIC PEPTIDE IN BULBUS ARTERIOSUS OF FRESHWATER TELEOSTEAN FISH. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(3):575-578. 1991. FR 37(2)
[Cho: Dep. Physiol., Med. School, Jeonbug Natl. Univ., Jeonju 560-180, Korea] *Silurus asotus, Carassius auratus, Ophicephalus argus,* and *Monopterus albus.*

92-002524 King, William V; Ronald G. Hodson; Peter Thomas and Craig V. Sullivan. HORMONAL CONTROL OF FINAL OOCYTE MATURATION IN STRIPED BASS, *MORONE SAXATILIS*. *Am. Zool.* 31(5):12A. 1991. Abstract only. FR 37(2)
[N.C. State Univ., Raleigh]

PHYSIOLOGY (Continued)

92-002525 Kirk, Kiaran. KCl COTRANSPORT IN ERYTHROCYTES FROM THE RIVER LAMPREY (*LAMPETRA FLUVIATILIS*). *J. Physiol. (Camb.)* Vol. 446. p. 7. 1992. FR 37(2)
[Univ. Lab. Physiol., Univ. Oxford, Parks Rd., Oxford OX1 3PT, England]

92-002526 Kiyohara, Sadao and Iwao Hidaka. RECEPTOR SITES FOR ALANINE, PROLINE, AND BETAINE IN THE PALATAL TASTE SYSTEM OF THE PUFFER, *FUGU PARDALIS*. *J. Comp. Physiol. A Sens. Neural Behav. Physiol.* 169(5):523-530. 1991. FR 37(2)
[Dep. Biol., Coll. Liberal Arts & Sci., Kagoshima Univ., Kagoshima 890, Japan]

92-002527 Knox, C. J. and S. A. Sower. MULTIPLE FORMS OF GONADOTROPIN-RELEASING HORMONE (GnRH) IN FOUR SPECIES OF TELEOSTS. *Am. Zool.* 31(5):20A. 1991. Abstract only. FR 37(2)
[Univ. N.H., Durham] *Microgadus proximus, Pleuronectes americanus, Fundulus heteroclitus*, and *Catostomus commersoni*.

92-002528 Koch, Franz; Wolfgang Wieser and Harald Niederstatter. INTERACTIVE EFFECTS OF SEASON AND TEMPERATURE ON ENZYME ACTIVITIES, TISSUE AND WHOLE ANIMAL RESPIRATION IN ROACH, *RUTILUS RUTILUS*. *Environ. Biol. Fishes* 33(1-2):73-85. 1992. FR 37(2)
[Inst. Zool., Univ. Innsbruck, Technikerstr. 25, A-6020 Innsbruck, Austria]

92-002529 Kokkala, I. and J. P. Wourms. FLUORESCENCE LOCALIZATION OF ENDOSOMAL-LYSOSOMAL ENZYMES IN INTACT LIVING TROPHOTAENIAL PLACENTAL CELLS OF GOODEID FISHES. *Am. Zool.* 31(5):79A. 1991. Abstract only. FR 37(2)
[Furman Univ., Greenville, SC] *Goodea, Ilyodon*, and *Ameca*.

92-002530 Konstantinov, A. S.; V. V. Zdanovich and A. M. Sholokhov. ASTATIC TEMPERATURE CONDITIONS AS AN OPTIMIZATION FACTOR OF GROWTH, ENERGETICS, AND PHYSIOLOGICAL STATE OF FISH FRIES. *Mosc. Univ. Biol. Sci. Bull. (Engl. Transl. Vestn. Mosk. Univ. Biol.)* 46(2):39-45. 1991. FR 37(2)
Acipenser gueldenstaedti, Cyprinus carpio, and *Tilapia mossambica*.

92-002531 Kormanik, G. A. OSMOTIC AND IONIC GRADIENTS DURING DEVELOPMENT OF THE OVIPAROUS SKATE, *RAJA ERINACEA*. *Am. Zool.* 31(5):120A. 1991. Abstract only. FR 37(2)
[Univ. N.C., Asheville]

92-002532 Korsmeyer, K. E. ACUTE TEMPERATURE EFFECTS ON THE HEART RATES OF KELP BASS (*PARALABRAX CLATHRATUS*) AND SPOTTED SAND BASS (*P. MACULATOFASCIATUS*). *Am. Zool.* 31(5):57A. 1991. Abstract only. FR 37(2)
[Scripps Inst. Oceanogr., Univ. Calif., San Diego, La Jolla]

92-002533 Krise, William F. and Roger L. Herman. RESISTANCE OF UNDERYEARLING AND YEARLING ATLANTIC SALMON AND LAKE TROUT TO SUPERSATURATION WITH AIR. *J. Aquat. Anim. Health* 3(4):248-253. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Natl. Fish. Res. & Dev. Lab., Rural Delivery 4, Box 63, Wellsboro, PA 16901] *Salvelinus namaycush* and *Salmo salar*.

92-002534 Kristjansson, Magnus M. and Henrik H. Nielsen. PURIFICATION AND CHARACTERIZATION OF TWO CHYMOTRYPSIN-LIKE PROTEASES FROM THE PYLORIC CAECA OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):247-253. 1992. FR 37(2)
[Sci. Inst., Univ. Iceland, Dunhagi 3, Reykjavik, IS-107, Iceland]

92-002535 Kuwaye, Todd T. 17 ALPHA-METHYLTESTOSTERONE AND GROWTH OF THE TILAPIA, *OREOCHROMIS MOSSAMBICUS*. *Pac. Sci.* 46(1):96. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-002536 Kuz'min, Ye. V. COMPARATIVE STUDY OF ISOZYMES OF MUSCLE MALATE DEHYDROGENASE OF THE OB POPULATION OF THE SIBERIAN STURGEON, *ACIPENSER BAERI*, AND THE DON AND KAMA STERLET, *ACIPENSER RUTHENUS*. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):139-144. 1991. FR 37(2)
[Inst. Inland Waters Biol., USSR Acad. Sci. (IBVV), Borok, Yaroslavl Oblast, USSR]

92-002537 Kuz'mina, V. V. and Ye. G. Kuz'mina. CHARACTERISTICS OF SOME DIGESTIVE TRACT ENZYMES IN THE STERLET, *ACIPENSER RUTHENUS*. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):120-129. 1991. FR 37(2)
[Inst. Inland Waters Biol., USSR Acad. Sci., Borok Yaroslavl' Ovlast, USSR]

92-002538 Labbe, C. and M. Loir. PLASMA MEMBRANE OF TROUT SPERMATOZOA: I. ISOLATION AND PARTIAL CHARACTERIZATION. *Fish Physiol. Biochem.* 9(4):325-338. 1991. FR 37(2)
[INRA, Physiol. Poissons, Campus Beaulieu, 35042 Rennes Cedex, France] *Oncorhynchus mykiss*.

92-002539 Ladu, B. M. B. and L. G. Ross. THE INFLUENCE OF STRESS ON OXYGEN CONSUMPTION OF RAINBOW TROUT. *Aquaculture* 100(1-3):172. 1992. Abstract only. FR 37(2)
[Fed. Univ. Technol., Yola, Gongola State, Nigeria] *Oncorhynchus mykiss*.

PHYSIOLOGY (Continued)

92-002540 Ladu, B. M. B. and L. G. Ross. THE EFFECT OF METHODS OF IMMOBILIZATION ON THE HAEMATOLOGY AND TISSUE CHEMISTRY OF RAINBOW TROUT. *Aquaculture* 100(1-3):172. 1992. Abstract only. FR 37(2)

[Fed. Univ. Technol., Yola, Gongola State, Nigeria] *Oncorhynchus mykiss.*

92-002541 Lane, H. C.; C. G. Schmidt and N. N. Duke. EFFECTS OF HYPEROXIA ON SOME FACTORS INFLUENCING THE OXYGEN-CARRYING CAPACITY OF TROUT BLOOD. *Am. Zool.* 31(5):73A. 1991. Abstract only. FR 37(2)

[Wake Forest Univ., Winston-Salem, NC] *Oncorhynchus mykiss.*

92-002542 Lee, Cheng-Sheng; Clyde S. Tamaru; Christopher D. Kelley; Aaron Moriwake and Garret T. Miyamoto. THE EFFECT OF SALINITY ON THE INDUCTION OF SPAWNING AND FERTILIZATION IN THE STRIPED MULLET, *MUGIL CEPHALUS. Aquaculture* 102(3):289-296. 1992. FR 37(2)

[Tamaru: Oceanic Inst., P.O. Box 25280, Honolulu, HI 96825-0280]

92-002543 Lee, J. A. C.; P. S. James; M. W. Smith and A. R. Cossins. AMINO ACID TRANSPORT IN THE INTESTINAL MUCOSA OF TEMPERATURE-ACCLIMATED CARP. *J. Therm. Biol.* 16(1):7-11. 1991. FR 37(2)

[Environ. Physiol. Res. Group, Dep. Environ. & Evol. Biol., Univ. Liverpool, P.O. Box 147, Liverpool L69 3BX, England] *Cyprinus carpio.*

92-002544 Lo, Anthony W-I.; Catherine M. Harvey; Michael W. Wolowyk and James D. Young. CHARACTERIZATION OF L-PROLINE TRANSPORT IN ERYTHROCYTES OF A PRIMITIVE VERTEBRATE, THE PACIFIC HAGFISH (*EPTATRETUS STOUTI*). *J. Physiol. (Camb.)* Vol. 446. p. 176. 1992. FR 37(2)

[Dep. Biochem., Fac. Med., Chinese Univ. Hong Kong, Shatin, Hong Kong]

92-002545 Lombardi, J. and C. R. Graham, Jr. 500 MHZ NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF GLUCOSE AND ALANINE METABOLISM IN THE SHARK *MUSTELUS CANIS. Am. Zool.* 31(5):70A. 1991. Abstract only. FR 37(2)

[Univ. N.C., Greensboro]

92-002546 Long, John H., Jr. STIFFNESS AND DAMPING FORCES IN THE INTERVERTEBRAL JOINTS OF BLUE MARLIN (*MAKAIRA NIGRICANS*). *J. Exp. Biol.* Vol. 162. p. 131-155. 1992. FR 37(2)

[Dep. Biol., Vassar Coll., Poughkeepsie, NY 12601]

92-002547 Luft, J. Christopher; Jan E. Bly; Norman W. Miller and L. William Clem. THE IDENTIFICATION AND CHARACTERIZATION OF CHANNEL CATFISH T CELL DERIVED INTERLEUKINS. *Am. Zool.* 31(5):131A. 1991. Abstract only. FR 37(2)

[Dep. Microbiol., Univ. Miss. Med. Cent., Jackson 39216] *Ictalurus punctatus.*

92-002548 Magliulo Cepriano, L. and M. P. Schreibman. NEUROTENSIN (NT), GALANIN (GAL), AND FMRF-AMIDE IN THE BRAIN AND PITUITARY GLAND OF *XIPHOPHORUS. Am. Zool.* 31(5):19A. 1991. Abstract only. FR 37(2)

[Dep. Biol., Brooklyn Coll., CUNY, New York, NY 11210] *X. maculatus* and *X. helleri.*

92-002549 Mallefet, J. and F. Baguet. METABOLIC CONTROL OF *ARGYROPELECUS HEMIGYMNUS* PHOTOPHORES: EFFECTS OF GLUCOSE AND PYRUVATE. *Can. J. Zool.* 69(9):2410-2413. 1991. In English with French summ. FR 37(2)

[Lab. Physiol. Anim., Univ. Louvain, 5 Pl. Croix Sud, 1348 Louvain-la-Neuve, Belgium]

92-002550 Martin, K. L. M. AERIAL EMERGENCE AND RESPIRATORY GAS EXCHANGE IN INTERTIDAL AND SUBTIDAL FISHES. *Am. Zool.* 31(5):58A. 1991. Abstract only. FR 37(2)

[Friday Harbor Lab., Univ. Wash., Seattle]

92-002551 Maugle, Paul D.; Phyllis R. Brown and Katherine Hoffman. EFFECTS OF L-ASCORBIC ACID AND L-ASCORBYL 2-MONOPHOSPHATE SODIUM ON ATLANTIC SALMON, *SALMO SALAR. J. World Aquacult. Soc.* 22(3):39A. 1991. Abstract only. FR 37(2)

[P.D.M. & Assoc., 88 Central Ave., Norwich, CT 06380]

92-002552 McCarthy, I. D.; C. G. Carter and D. F. Houlihan. CORRELATING FOOD INTAKE AND SPECIFIC GROWTH RATE OF RAINBOW TROUT OF DIFFERENT SIZES. *Aquaculture* 100(1-3):326. 1992. Abstract only. FR 37(2)

[Fish Biol. Res. Group, Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, Scotland] *Oncorhynchus mykiss.*

92-002553 McClellan, Andrew D. FUNCTIONAL REGENERATION AND RECOVERY OF LOCOMOTOR ACTIVITY IN SPINALLY TRANSECTED LAMPREY. *J. Exp. Zool.* 261(3):274-287. 1992. FR 37(2)

[Div. Biol. Sci., Univ. Mo., Columbia 65211] *Petromyzon marinus.*

PHYSIOLOGY (Continued)

92-002554 McManus, M. G. ENVIRONMENTAL EFFECTS ON TRIACYLGLYCEROL QUANTITIES OF MALE *POECILIA LATIPINNA* (PISCES: POECILIIDAE). *Am. Zool.* 31(5):126A. 1991. Abstract only. FR 37(2)

[Fla. State Univ., Tallahassee]

92-002555 Mencarelli, Caterina; Barbara Magi; Barbara Marzocchi; Mario Contomi and Vitaliano Pallini. EVOLUTIONARY TRENDS OF NEUROFILAMENT PROTEINS IN FISH. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(4):733-740. 1991. FR 37(2)

[Dep. Evol. Biol., Univ. Siena, 53100 Siena, Italy] *Perca fluviatilis, Acipenser transmontanus, Oncorhynchus mykiss, Scorpaena porcus, Serranus scriba,* and *Mugil saliens.*

92-002556 Mensinger, Allen Francis. BIOLUMINESCENCE AND VISION IN THE MIDSHIPMAN FISH, *PORICHTHYS NOTATUS. Ph.D. dissertation, Univ. Calif. (Santa Barbara)* 184p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4062. 1992. Order No. DA9204607. FR 37(2)

92-002557 Mims, Steven D. EVALUATION OF ACTIVATOR SOLUTIONS, MOTILITY DURATION, AND SHORT-TERM STORAGE OF PADDLEFISH SPERMATOZOA. *J. World Aquacult. Soc.* 22(4):224-229. 1991. FR 37(2)

[Aquacult. Res. Cent., Community Res. Serv., Ky. State Univ., Frankfort 40601] *Polyodon spathula.*

92-002558 Miura, Takeshi; Kohei Yamauchi; Hiroya Takahashi and Yoshitaka Nagahama. THE ROLE OF HORMONES IN THE ACQUISITION OF SPERM MOTILITY IN SALMONID FISH. *J. Exp. Zool.* 261(3):359-363. 1992. FR 37(2)

[Nagahama: Lab. Reprod. Biol., Natl. Inst. Basic Biol., Okazaki 444, Japan] *Oncorhynchus masou.*

92-002559 Miyasaki, Taiko; Mamoru Sato; Reiji Yoshinaka and Morihiko Sakaguchi. SYNTHESIS OF ASCORBYL-2-PHOSPHATE BY LIVER ENZYME OF RAINBOW TROUT *ONCORHYNCHUS MYKISS. Comp. Biochem. Physiol. B Comp. Biochem.* 100(4):711-716. 1991. FR 37(2)

[Dep. Fish., Fac. Agric., Kyoto Univ., Kitashirakawa, Sakyo-ku, Kyoto-city 606-01, Japan]

92-002560 Morgan, John D. and George K. Iwama. EFFECTS OF SALINITY ON GROWTH, METABOLISM, AND ION REGULATION IN JUVENILE RAINBOW AND STEELHEAD TROUT (*ONCORHYNCHUS MYKISS*) AND FALL CHINOOK SALMON (*ONCORHYNCHUS TSHAWYTSCHA*). *Can. J. Fish. Aquat. Sci.* 48(11):2083-2094. 1991. In English with French summ. FR 37(2)

[Dep. Anim. Sci., Univ. British Columbia, 2357 Main Mall, Vancouver, BC, Canada V6T 1Z4]

92-002561 Mori, Ikue; Tatsuya Sakamoto and Tetsuya Hirano. GROWTH HORMONE (GH)-DEPENDENT HEPATIC GH RECEPTORS IN THE JAPANESE EEL, *ANGUILLA JAPONICA*: EFFECTS OF HYPOPHYSECTOMY AND GH INJECTION. *Gen. Comp. Endocrinol.* 85(3):385-391. 1992. FR 37(2)

[Ocean Res. Inst., Univ. Tokyo, Nakano, Tokyo 164, Japan]

92-002562 Mourad, Mohamed Hassan. EFFECTS OF WATER TEMPERATURE ON THE ECG; HEART RATE AND RESPIRATORY RATE OF THE EEL *ANGUILLA ANGUILLA* L. *Acta Ichthyol. Piscatoria* 21(1):81-86. 1991. In English with Polish summ. FR 37(2)

[Inst. Oceanogr. & Fish., Alexandria, Egypt]

92-002563 Mugiya, Yasuo and Keisuke Takayama. CALCIUM EXCRETION INTO BILE IN RELATION TO STARVATION, CALCIUM LOAD AND 17β-OESTRADIOL ADMINISTRATION IN THE RAINBOW TROUT, *ONCORHYNCHUS MYKISS. Comp. Biochem. Physiol. A Comp. Physiol.* 101(2):375-379. 1992. FR 37(2)

[Fac. Fish., Hokkaido Univ., Minato-3, Hakodate 041, Japan]

92-002564 Munger, R. S.; S. D. Reid and Chris M. Wood. EXTRACELLULAR FLUID VOLUME MEASUREMENTS IN TISSUES OF THE RAINBOW TROUT *(ONCORHYNCHUS MYKISS) IN VIVO* AND THEIR EFFECTS ON INTRACELLULAR pH AND ION CALCULATIONS. *Fish Physiol. Biochem.* 9(4):313-323. 1991. FR 37(2)

[Dep. Biol., McMaster Univ., 1280 Main St. W., Hamilton, ON, Canada L8S 4K1]

92-002565 Murai, Takeshi. PROTEIN NUTRITION OF RAINBOW TROUT. *Aquaculture* 100(1-3):191-207. 1992. FR 37(2)

[Natl. Res. Inst. Fish. Sci., 5-5-1 Kachidoki, Chuo-ku, Tokyo 104, Japan] *Oncorhynchus mykiss.*

92-002566 Murakami, Masahiro; Ichiro Iuchi and Kenjiro Yamagami. PARTIAL CHARACTERIZATION AND SUBUNIT ANALYSIS OF MAJOR PHOSPHOPROTEINS OF EGG YOLK IN THE FISH, *ORYZIAS LATIPES. Comp. Biochem. Physiol. B Comp. Biochem.* 100(3):587-593. 1991. FR 37(2)

[Yamagami: Life Sci. Inst., Sophia Univ., 7-1 Kioicho, Chiyoda-ku, Tokyo 102, Japan]

PHYSIOLOGY (Continued)

92-002567 Mustafa, Md. Ghulam; Heisuke Nakagawa; Shotaro Ohya; Toshikazu Shimizu; Yoshiaki Horikawa and Shin-ichi Yamamoto. EFECTS OF VARIOUS LEVEL OF DIETARY MEDIUM CHAIN TRIGLYCERIDES ON GROWTH AND LIPID RESERVATION IN AYU. *Nippon Suisan Gakkaishi* 57(12):2327-2331. 1991. In English with Japanese summ. FR 37(2)

[Fac. Appl. Biol. Sci., Hiroshima Univ., Kagamiyama, Saijo, Higashi-Hiroshima, Hiroshima 724, Japan] *Plecoglossus altivelis.*

92-002568 Mustafa, T. and F. B. Jensen. EFFECT OF HYPOXIA ON *IN VIVO* THROMBOXANE AND PROSTACYCLIN LEVELS IN ARTERIAL BLOOD OF RAINBOW TROUT, *ONCORHYNCHUS MYKISS* (WALBAUM). *J. Fish Biol.* 40(2):303-306. 1992. FR 37(2)

[Inst. Biol., Odense Univ., DK-5230 Odense M, Denmark]

92-002569 Natarajan, M.; B. Ross and L. G. Ross. SUSCEPTIBILITY OF CARP AND TILAPIA α-AMYLASE TO PURIFIED WHEAT AMYLASE INHIBITOR. *Aquaculture* 102(3):265-274. 1992. FR 37(2)

[B. Ross: Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland] *Cyprinus carpio* and *Tilapia nilotica.*

92-002570 Nevalyonny, A. N.; V. F. Zaitsev; S. N. Yegorov and S. G. Korostelyov. EFFECT OF DIFFERENT WATER pH VALUES ON ACTIVITY OF SOME DIGESTIVE ENZYMES IN CARP (*CYPRINUS CARPIO* L.). *Acta Ichthyol. Piscatoria* 21(1):59-63. 1991. In English with Polish summ. FR 37(2)

[Karl Marx Sq. 5, Flat 81, 414040 Astrakhan, USSR]

92-002571 Nicol, Alister U. and Peter R. Laming. SUSTAINED POTENTIAL SHIFT RESPONSES AND THEIR RELATIONSHIP TO THE ECG RESPONSE DURING AROUSAL IN THE GOLDFISH (*CARASSIUS AURATUS*). *Comp. Biochem. Physiol. A Comp. Physiol.* 101(3):517-532. 1992. FR 37(2)

[Div. Cell & Exp. Biol., School Biol. & Biochem., Queen's Univ., Belfast BT7 1NN, Northern Ireland]

92-002572 No, Hong Kyoon and Trond Storebakken. PIGMENTATION OF RAINBOW TROUT WITH ASTAXANTHIN AND CANTHAXANTHIN IN FRESHWATER AND SALTWATER. *Aquaculture* 101(1/2):123-134. 1992. FR 37(2)

[Storebakken: AKVAFORSK (Inst. Acquacult. Res.), N-6600 Sunndalsora, Norway] *Oncorhynchus mykiss.*

92-002573 O'Connor, P. K. and M. A. Sheridan. EFFECTS OF GROWTH HORMONE ON LIPID MOBILIZATION IN RAINBOW TROUT LIVER. *Am. Zool.* 31(5):55A. 1991. Abstract only. FR 37(2)

[N.D. State Univ., Fargo 58105] *Oncorhynchus mykiss.*

92-002574 Olafsen, J. A. and G. H. Hansen. INTACT ANTIGEN UPTAKE IN INTESTINAL EPITHELIAL CELLS OF MARINE FISH LARVAE. *J. Fish Biol.* 40(2):141-156. 1992. FR 37(2)

[Dep. Mar. Biochem., Norwegian Coll. Fish. Sci., Univ. Tromso, Dramsveien 201, N-9000 Tromso, Norway] *Gadus morhua* and *Clupea harengus.*

92-002575 Oliva-Teles, Aires and Sadasivan J. Kaushik. THE EFFECT OF FISH WEIGHT ON THE OPTIMUM PROTEIN TO ENERGY RATIO OF DIETS FOR RAINBOW TROUT. *Aquaculture* 100(1-3):233. 1992. Abstract only. FR 37(2)

[Inst. Zool., Fac. Cienc., 4000 Porto, Portugal] *Oncorhynchus mykiss.*

92-002576 Oliver, A. S. HERMAPHRODITE SEX HORMONES: *IN VITRO* SECRETION OF STEROID HORMONES FROM THE OVOTESTIS OF THE TELEOST *SERRANUS SUBLIGARIUS. Am. Zool.* 31(5):67A. 1991. Abstract only. FR 37(2)

[Duke Univ., Mar. Lab., Beaufort, NC]

92-002577 Pankhurst, N. W. and J. F. Carragher. OOCYTE MATURATION AND CHANGES IN PLASMA STEROID LEVELS IN SNAPPER *PAGRUS (=CHRYSOPHRYS) AURATUS*(SPARIDAE) FOLLOWING TREATMENT WITH HUMAN CHORIONIC GONADOTROPIN. *Aquaculture* 101(3/4):337-347. 1992. FR 37(2)

[Leigh Mar. Lab., Univ. Auckland, Private Bag, Auckland, New Zealand]

92-002578 Parsons, G. R. SWIMMING EFFICIENCY OF THE WHITE CRAPPIE (*POMOXIS ANNULARIS*). *Am. Zool.* 31(5):123A. 1991. Abstract only. FR 37(2)

[Univ. Miss., University]

92-002579 Parsons, Glenn R. and Harry J. Grier. SEASONAL CHANGES IN SHARK TESTICULAR STRUCTURE AND SPERMATOGENESIS. *J. Exp. Zool.* 261(2):173-184. 1992. FR 37(2)

[Dep. Biol., Univ. Miss., University 38677] *Sphyrna tiburo.*

92-002580 Partridge, J. C.; S. N. Archer and J. Van Oostrum. SINGLE AND MULTIPLE VISUAL PIGMENTS IN DEEP-SEA FISHES. *J. Mar. Biol. Assoc. U.K.* 72(1):113-130. 1992. FR 37(2)

[Dep. Zool., Univ. Bristol, Woodland Rd., Bristol BS8 1UG, England] *Scopelarchus analis, Stylephorus chordatus,* and data for 16 other species.

PHYSIOLOGY (Continued)

92-002581 Pavlidis, Michael; John Paschos; Vasso Theochari and Athanassios Dessypris. PHOTOPERIOD AND THE CONTROL OF RAINBOW TROUT SPAWNING TIME: ENDOCRINOLOGICAL ASPECTS. *Aquaculture* 100(1-3):327. 1992. Abstract only. FR 37(2)
[Div. Biochem., Cell & Mol. Biol. & Genet., Dep. Biol., Athens Univ., Panepistimiopolis-Kouponia 157 01, Greece] *Oncorhynchus mykiss.*

92-002582 Pelster, Bernd and Peter Scheid. COUNTERCURRENT CONCENTRATION AND GAS SECRETION IN THE FISH SWIM BLADDER. *Physiol. Zool.* 65(1):1-16. 1992. FR 37(2)
[Inst. Physiol., Ruhr-Univ. Bochum, Universitatsstr. 150, D-4630 Bochum, Germany] *Cyprinus carpio* and *Anguilla anguilla.*

92-002583 Perlman, Deborah Funkhouser. TAURINE SECRETION BY THE MARINE FISH KIDNEY. *Ph.D. dissertation, Brown Univ.* 134p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4619-4620. 1992. Order No. DA9204930. FR 37(2)
Pleuronectes americanus.

92-002584 Perry, K. A.; J. Pardo; J. G. Abrams and S. A. Sower. EFFECTS OF DIETARY TESTOSTERONE ON GROWTH, GONADAL DEVELOPMENT, PLASMA TESTOSTERONE AND SEAWATER TRANSFER DURING SMOLTIFICATION IN ATLANTIC SALMON. *Am. Zool.* 31(5):67A. 1991. Abstract only. FR 37(2)
[Univ. N.H., Durham] *Salmo salar.*

92-002585 Petersen, Christopher W.; Robert R. Warner; Sarah Cohen; Helen C. Hess and Amy T. Sewell. VARIABLE PELAGIC FERTILIZATION SUCCESS: IMPLICATIONS FOR MATE CHOICE AND SPATIAL PATTERNS OF MATING. *Ecology* 73(2):391-401. 1992. FR 37(2)
[Coll. Atl., 105 Eden St., Bar Harbor, ME 04609] *Thalassoma bifasciatum*in the Virgin Islands.

92-002586 Plisetskaya, E. M.; T. W. Moon; D. A. Larsen and W. W. Dickhoff. VIRTUAL ABSENCE OF LIVER GLYCOGEN IN FEEDING SMOLTS OF ATLANTIC SALMON (*SALMO SALAR*) IN SEAWATER. *Am. Zool.* 31(5):55A. 1991. Abstract only. FR 37(2)
[Univ. Wash., Seattle] *Oncorhynchus kisutch.*

92-002587 Poglida Silveira, W.; E. T. Kavamoto; M. G. Rigolino and Y. A. Tabata. [FERTILITY OF RAINBOW TROUT (*SALMO IRIDEUS*, GIBBONS) SEMEN, DILUTED AT VARIOUS LEVELS.] *Bol. Inst. Pesca (Brazil)* 15(1):51-54. 1988. In Portuguese with English summ. From Anim. Breed Abstr. 60(1):680. 1992. FR 37(2)
[Secao Biol. Aquat., Div. Pesca Interior, Inst. Pesca, Sao Paulo, SP, Brazil]

92-002588 Poh, C. H.; R. Yuen; M. C. M. Chung and H. E. Khoo. PURIFICATION AND PARTIAL CHARACTERIZATION OF HYALURONIDASE FROM STONEFISH (*SYNANCEJA HORRIDA*) VENOM. *Comp. Biochem. Physiol. B. Comp. Biochem.* 101(1/2):159-163. 1992. FR 37(2)
[Khoo: Dep. Biochem., Natl. Univ. Singapore, Kent Ridge, Singapore 0511]

92-002589 Ponomarev, V. I. THE INFLUENCE OF TEMPERATURE ON TOTAL AMYLASE ACTIVITY OF THE INTESTINAL MUCOSA OF SOME FISHES OF THE PECHORA RIVER BASIN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):103-112. 1991. FR 37(2)
[Lab. Ecol. Aquat. Organ., Inst. Biol., Komi Sci. Cent. Ural Div. USSR Acad. Sci., Syktyvkar, Komi, ASSR] *Salmo salar, Coregonus pidschian, Thymallus thymallus, Esox lucius,* and *Lota lota* in the USSR.

92-002590 Poston, Hugh A. RESPONSE OF ATLANTIC SALMON FRY TO FEED-GRADE LECITHIN AND CHOLINE. *Prog. Fish-Cult.* 53(4):224-228. 1991. FR 37(2)
[Tunison Lab. Fish Nutr., U.S. Fish & Wildl. Serv., 3075 Gracie Rd., Cortland, NY 13045-9357] *Salmo salar.*

92-002591 Powell, Mark D.; John F. Burka and Glenda M. Wright. RELATIONSHIP OF NON-MYELINATED NERVES AND EOSINOPHILIC GRANULE CELLS OF RAINBOW TROUT INTESTINE. *Aquaculture* 100(1-3):328-329. 1992. Abstract only. FR 37(2)
[Dep. Anat. & Physiol., Atl. Vet. Coll., Charlottetown, PI, Canada] *Oncorhynchus mykiss.*

92-002592 Powell, Roger L.; Michael V. Dodson and Joseph G. Cloud. SATELLITE CELLS FROM RAINBOW TROUT: SOME FACTORS THAT AFFECT CELL ATTACHMENT AND FUSION *IN VITRO*. *Aquaculture* 100(1-3):328. 1992. Abstract only. FR 37(2)
[Dep. Biol. Sci., Univ. Idaho, Moscow 83843] *Oncorhynchus mykiss.*

92-002593 Power, D. M. IMMUNOCYTOCHEMICAL IDENTIFICATION OF GROWTH HORMONE, PROLACTIN, AND GONADOTROPIN CELLS IN THE PITUITARY OF MALE PLAICE (*PLEURONECTES PLATESSA*) DURING GONADAL MATURATION. *Gen. Comp. Endocrinol.* 85(3):358-366. 1992. FR 37(2)
[Univ. Algarve, UCEH, Campus Gambelas, 800 Faro, Portugal]

92-002594 Ralphs, J. R. and M. Benjamin. CHONDROITIN AND KERATAN SULPHATE IN THE EPIDERMAL CLUB CELLS OF TELEOSTS. *J. Fish Biol.* 40(3):473-475. 1992. FR 37(2)
[Dep. Anat., Univ. Wales Coll. Cardiff, Cardiff CF1 3YF, Wales] *Corydoras aeneus, Acanthophthalmus semicinctus,* and *Botia horae.*

PHYSIOLOGY (Continued)

92-002595 Redondo-Muller, C.; M. P. Cosson; J. Cosson and R. Billard. *IN VITRO* MATURATION OF THE POTENTIAL FOR MOVEMENT OF CARP SPERMATOZOA. *Mol. Reprod. Dev.* 29(3):259-270. 1991. From Anim. Breed. Abstr. 60(1):681. 1992. FR 37(2)

[UA 671 CNRS Assoc. Paris VI, Stn. Mar., Villefranche-sur-Mer, France] *Cyprinus carpio.*

92-002596 Rome, Lawrence C.; Andrzej Sosnicki and In-Ho Choi. THE INFLUENCE OF TEMPERATURE ON MUSCLE FUNCTION IN THE FAST SWIMMING SCUP: II. THE MECHANICS OF RED MUSCLE. *J. Exp. Biol.* Vol. 163. p. 281-295. 1992. FR 37(2)

[Dep. Biol., Univ. Pa., Philadelphia 19104] *Stenotomus chrysops.*

92-002597 Rome, Lawrence C.; In-Ho Choi; Gordon Lutz and Andrzej Sosnicki. THE INFLUENCE OF TEMPERATURE ON MUSCLE FUNCTION IN THE FAST SWIMMING SCUP: I. SHORTENING VELOCITY AND MUSCLE RECRUITMENT DURING SWIMMING. *J. Exp. Biol.* Vol. 163. p. 259-279. 1992. FR 37(2)

[Dep. Biol., Univ. Pa., Philadelphia 19104] *Stenotomus chrysops.*

92-002598 Ron, Benny. CLEARANCE OF THYROID HORMONES FROM THE TILAPIA, *OREOCHROMIS MOSSAMBICUS*, AND EFFECTS OF TRIIODOTHYRONINE (T_3) ON INTESTINAL NUTRIENT ABSORPTION IN FRESHWATER- AND SEAWATER-ADAPTED TILAPIA. *Pac. Sci.* 46(1):102-103. 1992. Abstract only. FR 37(2)

[Dep. Zool. & Inst. Mar. Biol., Univ. Hawaii Manoa, Honolulu 96822]

92-002599 Ron, Benny; N. Harold Richman; Darren K. Okimoto; Greg M. Weber; E. Gordon Grau; Nathan L. Collie and Joseph J. Distefano III. CLEARANCE OF THYROID HORMONES FROM THE TILAPIA, *OREOCHROMIS MOSSAMBICUS*, AND THE EFFECTS OF TRIIODOTHYRONINE (T_3) ON INTESTINAL NUTRIENT ABSORPTION IN FRESHWATER- AND SEAWATER-ADAPTED TILAPIA. *J. World Aquacult. Soc.* 22(3):52A. 1991. Abstract only. FR 37(2)

[Inst. Mar. Biol., Univ. Hawaii Manoa, Honolulu 96744]

92-002600 Rose, Gary J. and Susan J. Call. DIFFERENTIAL DISTRIBUTION OF AMPULLARY AND TUBEROUS PROCESSING IN THE TORUS SEMICIRCULARIS OF *EIGENMANNIA*. *J. Comp. Physiol. A Sens. Neural Behav. Physiol.* 170(2):253-261. 1992. FR 37(2)

[Dep. Biol., Univ. Utah, Salt Lake City 84112]

92-002601 Rouille, Y.; J. Chauvet; M. T. Chauvet; R. Acher and A. L. Polenov. NEUROHYPOPHYSIAL HORMONES AS MOLECULAR EVOLUTIONARY TRACERS: INVESTIGATIONS ON THE STURGEONS *ACIPENSER STELLATUS* AND *ACIPENSER GULDENSTADTI*. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(4):721-726. 1991. FR 37(2)

[Acher: Lab. Biol. Chem., 96 Blvd. Raspail, 75006 Paris, France]

92-002602 Rubinsky, B.; A. Arav and A. L. Devries. THE CRYOPROTECTIVE EFFECT OF ANTIFREEZE GLYCOPEPTIDES FROM ANTARCTIC FISHES. *Cryobiology* 29(1):69-79. 1992. FR 37(2)

[Dep. Mechanical Eng., Univ. Calif., Berkeley 94720]

92-002603 Sas, Emilia; Leonard Maler and Barbro Tinner. CATECHOLAMINERGIC SYSTEMS IN THE BRAIN OF A GYMNOTIFORM TELEOST FISH: AN IMMUNOHISTOCHEMICAL STUDY. *J. Comp. Neurol.* 292(1):127-162. 1990. FR 37(2)

[Dep. Anat., Fac. Health Sci., School Med., 451 Smyth Rd., Ottawa, ON, Canada K1H 8M5] *Apteronotus leptorhynchus.*

92-002604 Scarabello, M.; C. M. Wood and G. J. F. Heigenhauser. GLYCOGEN DEPLETION IN JUVENILE RAINBOW TROUT AS AN EXPERIMENTAL TEST OF THE OXYGEN DEBT HYPOTHESIS. *Can. J. Zool.* 69(10):2562-2568. 1991. In English with French summ. FR 37(2)

[Dep. Med. Physiol., Univ. Calgary, 3330 Hospital Dr. N.W., Calgary, AB, Canada 2TN 4N1] *Oncorhynchus mykiss.*

92-002605 Scheuermann, Dietrich W.; Dirk Adriaensen; Jean-Pierre Timmermans and Marie H. A. De Groodt-Lasseel. IMMUNOHISTOCHEMICAL LOCALIZATION OF POLYPEPTIDE HORMONES IN PANCREATIC ENDOCRINE CELLS OF A DIPNOAN FISH, *PROTOPTERUS AETHIOPICUS*. *Acta Histochem.* 91(2):185-192. 1991. FR 37(2)

[Inst. Histol. & Microscopic Anat., Univ. Antwerpen, Groenenborgerlaan 171, B-2020 Antwerp, Belgium]

92-002606 Schwarz, F. J. and M. Kirchgessner. [INFLUENCE OF SUCROSE AND LACTOSE ON GROWTH AND CARCASS COMPOSITION OF CARP (*CYPRINUS CARPIO* L.).] *J. Anim. Physiol. Anim. Nutr.* 66(5):268-277. 1991. In German with English summ. FR 37(2)

[Inst. Ernahrungsphysiol. TU Munchen, W-8050 Freising-Weihenstephan, Germany]

PHYSIOLOGY (Continued)

92-002607 Schwarzbaum, Pablo J.; Wolfgang Wieser and Andrew R. Cossins. SPECIES-SPECIFIC RESPONSES OF MEMBRANES AND THE $Na^+ + K^+$ PUMP TO TEMPERATURE CHANGE IN THE KIDNEY OF TWO SPECIES OF FRESHWATER FISH, ROACH (*RUTILUS RUTILUS*) AND ARCTIC CHAR (*SALVELINUS ALPINUS*). *Physiol. Zool.* 65(1):17-34. 1992. FR 37(2)
[Wieser: Inst. Zool., Abteilung Zoophysiol., Technikerstr. 25, A-6020 Innsbruck, Austria]

92-002608 Sebert, Philippe; Bernard Simon and Lucien Barthelemy. ETHANOL CONCENTRATIONS IN PLASMA AND TISSUES OF FRESHWATER EEL *(ANGUILLA ANGUILLA)* EXPOSED TO 101 ATA OF HYDROSTATIC PRESSURE. *Comp. Biochem. Physiol. A Comp. Physiol.* 101(2):233-235. 1992. FR 37(2)
[Lab. Physiol., URA-CNRS 648, Fac. Med., BP 815, F-29285 Brest Cedex, France]

92-002609 Serrano, Julio A.; Gholam R. Nematipour and Delbert M. Gatlin III. DIETARY PROTEIN REQUIREMENT OF THE RED DRUM (*SCIAENOPS OCELLATUS*) AND RELATIVE USE OF DIETARY CARBOHYDRATE AND LIPID. *Aquaculture* 101(3/4):283-291. 1992. FR 37(2)
[Dep. Wildl. & Fish. Sci., Tex. A&M Univ. Syst., College Station 77843-2258]

92-002610 Shapiro, Douglas Y. PLASTICITY OF GONADAL DEVELOPMENT AND PROTANDRY IN FISHES. *J. Exp. Zool.* 261(2):194-203. 1992. FR 37(2)
[Dep. Mar. Sci., Univ. Puerto Rico, Mayaguez 00681] *Amphiprion melanopus* and *Sparus auratus.*

92-002611 Sheridan, M. A. and J. S. Harmon. PREVIOUS NUTRITIONAL STATE AND GLUCOSE MODULATE GLUCAGON-MEDIATED HEPATIC LIPOLYSIS IN RAINBOW TROUT. *Am. Zool.* 31(5):65A. 1991. Abstract only. FR 37(2)
[N.D. State Univ., Fargo 58105] *Oncorhynchus mykiss.*

92-002612 Sidie, J. M. and K. L. Simpson. CONDUCTIVITY EFFECTS ON ELECTRIC ORGAN DISCHARGE. *Am. Zool.* 31(5):34A. 1991. Abstract only. FR 37(2)
[Ursinus Coll., Collegeville, PA] *Eigenmannia* and *Apteronotus.*

92-002613 Simpson, A. L.; N. B. Metcalfe and J. E. Thorpe. A SIMPLE NON-DESTRUCTIVE BIOMETRIC METHOD FOR ESTIMATING FAT LEVELS IN ATLANTIC SALMON, *SALMO SALAR* L., PARR. *Aquacult. Fish. Manage.* 23(1):23-29. 1992. FR 37(2)
[Dep. Zool., Univ. Glasgow, Glasgow G12 8QQ, Scotland]

92-002614 Singarajah, K. V. and F. I. Harosi. VISUAL CELLS AND PIGMENTS IN A DEMERSAL FISH, THE BLACK SEA BASS (*CENTROPRISTIS STRIATA*). *Biol. Bull. (Woods Hole)* 182(1):135-144. 1992. FR 37(2)
[Lab. Mar. Biol. & Comp. Physiol., DSE-CCEN, Fed. Univ. Paraiba, Joao Pessoa-58059, PB, Brazil]

92-002615 Singh, Amita and T. P. Singh. CIRCADIAN VARIATIONS IN CIRCULATING PLASMA SEX STEROIDS IN FEMALE CATFISH, *CLARIAS BATRACHUS* (LINN.). *Indian J. Exp. Biol.* 29(9):864-866. 1991. FR 37(2)
[T. P. Singh: Fish Endocrinol. Lab., Cent. Advanced Study Zool., Banaras Hindu Univ., Varanasi-221 005, India]

92-002616 Sire, M. F.; D. Dorin and J. M. Vernier. INTESTINAL ABSORPTION OF MACROMOLECULAR PROTEINS IN RAINBOW TROUT. *Aquaculture* 100(1-3):?34-235. 1992. Abstract only. FR 37(2)
[Cytophysiol. Nutr. Poissons, Univ. Paris-Sud, Orsay, France] *Oncorhynchus mykiss.*

92-002617 Soengas, J. L.; P. Rey; G. Rozas; M. D. Andres and M. Aldegunde. EFFECTS OF CORTISOL AND THYROID HORMONE TREATMENT ON THE GLYCOGEN METABOLISM OF SELECTED TISSUES OF DOMESTICATED RAINBOW TROUT, *ONCORHYNCHUS MYKISS. Aquaculture* 101(3/4):317-328. 1992. FR 37(2)
[Aldegunde: Dep. Fisiol., Lab. Fisiol. Anim., Fac. Biol., Univ. Santiago de Compostela, 15706 Santiago de Compostela, Spain]

92-002618 Soivio, Antti and Juha Koskela. THE EFFECT OF ANTIBIOTICS ON THE APPARENT DIGESTIBILITY OF FEED FOR RAINBOW TROUT. *Aquaculture* 100(1-3):235. 1992. Abstract only. FR 37(2)
[Finnish Game & Fish. Res. Inst., Fish. Div., Helsinki, Finland] *Oncorhynchus mykiss.*

92-002619 Srivastava, Rakesh K.; Joseph A. Brown and Margaret E. Brosnan. THE PRESENCE OF POLYAMINES DURING EMBRYONIC DEVELOPMENT OF ARCTIC CHARR, *SALVELINUS ALPINUS. Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):153-157. 1992. FR 37(2)
[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002620 Steinacker, A. and A. Romero. VOLTAGE-GATED POTASSIUM CURRENT AND RESONANCE IN THE TOADFISH SACCULAR HAIR CELL. *Brain Res.* 574(1/2):229-236. 1992. FR 37(2)
[Inst. Neurobiol., Univ. Puerto Rico, Med. Sci. Campus, 201 Blvd. Valle, San Juan, PR 00901] *Opsanus tau.*

92-002621 Storebakken, Trond and Hong Kyoon No. PIGMENTATION OF RAINBOW TROUT. *Aquaculture* 100(1-3):209-229. 1992. FR 37(2)
[AKVAFORSK, Inst. Aquacult. Res., N-6600 Sunndalsora, Norway] *Oncorhynchus mykiss.*

PHYSIOLOGY (Continued)

92-002622 Stuesse, Sherry L. and William L. R. Cruce. IMMUNOHISTOCHEMICAL LOCALIZATION OF SEROTONINERGIC, ENKEPHALINERGIC, AND CATECHOLAMINERGIC CELLS IN THE BRAINSTEM AND DIENCEPHALON OF A CARTILAGINOUS FISH, *HYDROLAGUS COLLIEI*. *J. Comp. Neurol.* 309(4):535-548. 1991. FR 37(2)

[Neurobiol. Dep., Northeast. Ohio Univ., Coll. Med., Rootstown 44272]

92-002623 Stuesse, Sherry L.; William L. R. Cruce and R. Glenn Northcutt. LOCALIZATION OF SEROTONIN, TYROSINE HYDROXYLASE, AND LEU-ENKEPHALIN IMMUNOREACTIVE CELLS IN THE BRAINSTEM OF THE HORN SHARK, *HETERODONTUS FRANCISCI*. *J. Comp. Neurol.* 308(2):277-292. 1991. FR 37(2)

[Neurobiol. Dep., Northeast. Ohio Univ., Coll. Med., Rootstown 44272]

92-002624 Subasinghe, R. P. and C. Sommerville. EFFECTS OF TEMPERATURE ON HATCHABILITY, DEVELOPMENT AND GROWTH OF EGGS AND YOLKSAC FRY OF *OREOCHROMIS MOSSAMBICUS* (PETERS) UNDER ARTIFICIAL INCUBATION. *Aquacult. Fish. Manage.* 23(1):31-39. 1992. FR 37(2)

[Fac. Fish. & Mar. Sci., Univ. Pertanian Malaysia, 43400 Serdang, Selangor Darul Ehsan, Malaysia]

92-002625 Sukumasavin, N.; W. Leelapatra; E. McLean and E. M. Donaldson. ORALLY INDUCED SPAWNING OF THAI CARP (*PUNTIUS GONIONOTUS*, BLEEKER) FOLLOWING CO-ADMINISTRATION OF DES GLY^{10} (D-Arg^{6}) sGnRH ETHYLAMIDE AND DOMPERIDONE. *J. Fish Biol.* 40(3):477-479. 1992. FR 37(2)

[McKean: Dep. Fish. & Oceans, West Vancouver Lab., 4160 Marine Dr., West Vancouver, BC, Canada V7V 1N6]

92-002626 Sullivan, Craig V.; Ronald G. Hodson and L. Curry Woods III. MATURATIONAL RESPONSES OF STRIPED BASS, *MORONE SAXATILIS*, TO GONADOTROPIN RELEASING-HORMONE ANALOGUE. *Am. Zool.* 31(5):12A. 1991. Abstract only. FR 37(2)

[N.C. State Univ., Raleigh]

92-002627 Sun, L.-Z. and A. Farmanfarmaian. AGE-DEPENDENT EFFECTS OF GROWTH HORMONE ON STRIPED BASS HYBRIDS. *Comp. Biochem. Physiol. A Comp. Physiol.* 101(2):237-248. 1992. FR 37(2)

[Farmanfarmaian: Nelson Biol. Lab., Rutgers Univ., P.O. Box 1059, Piscataway, NJ 08855] *Morone saxatilis* x *M. chrysops.*

92-002628 Sundby, Anne; Gro-Ingunn Hemre; Borgar Borrebaek; Berit Christophersen and Anne K. Blom. INSULIN AND GLUCAGON FAMILY PEPTIDES IN RELATION TO ACTIVITIES OF HEPATIC HEXOKINASE AND OTHER ENZYMES IN FED AND STARVED ATLANTIC SALMON *(SALMO SALAR)* AND COD *(GADUS MORHUA)*. *Comp. Biochem. Physiol. B Comp. Biochem.* 100(3):467-470. 1991. FR 37(2)

[Dep. Physiol. & Nutr., Vet. Coll. Norway, P.O. Box 8146 DEP, Oslo, Norway]

92-002629 Suquet, M.; M. H. Omnes; Y. Normant and C. Fauvel. ASSESSMENT OF SPERM CONCENTRATION AND MOTILITY IN TURBOT (*SCOPHTHALMUS MAXIMUS*). *Aquaculture* 101(1/2):177-185. 1992. FR 37(2)

[Inst. Francais Exploitation Mer, BP 70, 29280 Plouzane, France]

92-002630 Swaim, William Duane III. MAJOR GLYCOPROTEINS OF THE DEVELOPING NERVOUS SYSTEM IN TELEOSTS. *Ph.D. dissertation, Univ. Arkansas* 106p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4073. 1992. Order No. DA9204786. FR37(2)

92-002631 Swanson, P. and C. V. Sullivan. ISOLATION OF STRIPED BASS (*MORONE SAXATILIS*) PITUITARY HORMONES. *Am. Zool.* 31(5):3A. 1991. Abstract only. FR 37(2)

[Univ. Wash., Seattle]

92-002632 Sweeting, R. M. and J. G. Eales. THE ACUTE INFLUENCE OF INGESTED THYROID HORMONES ON HEPATIC DEIODINATION PATHWAYS IN THE RAINBOW TROUT, *ONCORHYNCHUS MYKISS*. *Gen. Comp. Endocrinol.* 85(3):376-384. 1992. FR 37(2)

[Dep. Biol. Sci., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6]

92-002633 Sweeting, R. M. and J. G. Eales. HPLC ANALYSIS OF *IN VITRO* HEPATIC DEIODINATION PRODUCTS OF THYROID HORMONES IN THE RAINBOW TROUT, *ONCORHYNCHUS MYKISS*. *Gen. Comp. Endocrinol.* 85(3):367-375. 1992. FR 37(2)

[Dep. Biol. Sci., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6]

92-002634 Tao, Yunxia; Ronald G. Hodson; L. Curry Woods III; Richard O. Bennett and Craig V. Sullivan. VITELLOGENIN AND VITELLOGENESIS IN STRIPED BASS, *MORONE SAXATILIS*. *Am. Zool.* 31(5):41A. 1991. Abstract only. FR 37(2)

[N.C. State Univ., Raleigh]

PHYSIOLOGY (Continued)

92-002635 Taranger, G. L; S. O. Stefansson and T. Hansen. ADVANCEMENT AND SYNCHRONIZATION OF OVULATION IN ATLANTIC SALMON (*SALMO SALAR* L.) FOLLOWING INJECTIONS OF LHRH ANALOGUE. *Aquaculture* 102(1/2):169-175. 1992. FR 37(2)

[Dep. Fish. & Mar. Biol., Univ. Bergen, High Technol. Cent., N-5020 Bergen, Norway]

92-002636 Tiersch, T. R.; B. A. Simco; K. B. Davis and S. S. Wachtel. STUDIES ON SEX DETERMINATION IN CHANNEL CATFISH (*ICTALURUS PUNCTATUS*). *Am. Zool.* 31(5):5A. 1991. Abstract only. FR 37(2)

[Memphis State Univ., Memphis, TN]

92-002637 Titus, Eric Ellis. CHARACTERIZATION AND MODULATION OF VOLATILE FATTY ACID TRANSPORT IN THE GASTROINTESTINAL TRACT OF AN HERBIVOROUS TELEOST. *Ph.D. dissertation, Univ. Hawaii* 148p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4622-4623. 1992. Order No. DA9205879. FR 37(2)

Tilapia mossambica.

92-002638 Toledo, J. D.; C. L. Marte and A. R. Castillo. SPONTANEOUS MATURATION AND SPAWNING OF SEA BASS *LATES CALCARIFER* IN FLOATING NET CAGES. *J. Appl. Ichthyol.* 7(4):217-222. 1991. In English with German and French summ. FR 37(2)

[Aquacult. Dep., SEAFDEC, P.O. Box 256, Iloilo City, Philippines 5000]

92-002639 Trudeau, V. L.; H. R. Lin and R. E. Peter. TESTOSTERONE POTENTIATES THE SERUM GONADOTROPIN RESPONSE TO GONADOTROPIN-RELEASING HORMONE IN THE COMMON CARP *(CYPRINUS CARPIO)* AND CHINESE LOACH *(PARAMISGURNUS DABRYANUS). Can. J. Zool.* 69(9):2480-2484. 1991. In English with French summ. FR 37(2)

[Peter: Dep. Zool., Univ. Alberta, Edmonton, AB, Canada T6G 2E9]

92-002640 Trummel, Donald E.; Kerry D. Fulcher; Jill C. Beck and Joseph G. Cloud. SUBPOPULATIONS OF RAINBOW TROUT SPERMATOZOA WITHIN INDIVIDUAL MALES AS DETECTED BY A SPERM-SPECIFIC MONOCLONAL ANTIBODY. *Aquaculture* 100(1-3):329. 1992. Abstract only. FR 37(2)

[Dep. Biol. Sci., Univ. Idaho, Moscow 83843]

92-002641 Tsang, Paul C. W. and Ian P. Callard. REGULATION OF OVARIAN STEROIDOGENESIS *IN VITRO* IN THE VIVIPAROUS SHARK, *SQUALUS ACANTHIAS. J. Exp. Zool.* 261(1):97-104. 1992. FR 37(2)

[Dep. Anim. & Nutr. Sci., Kendall Hall, Univ. N.H., Durham 03824]

92-002642 Tsukuda, Hiroko. TEMPERATURE DEPENDENCE OF THE FREQUENCY AND AMPLITUDE OF BEAT OF THE ISOLATED HEART FROM THERMALLY ACCLIMATED GOLDFISH. *J. Therm. Biol.* 15(2):171-175. 1990. FR 37(2)

[Dep. Biol., Fac. Sci., Osaka City Univ., Sugimoto-3, Sumiyoshi-ku, Osaka 558, Japan] *Carassius auratus.*

92-002643 Tufts, B. L.; R. G. Boutilier and R. P. Henry. THE DISTRIBUTION AND FUNCTION OF ERYTHROCYTE AND BRANCHIAL CARBONIC ANHYDRASE IN THE LAMPREY AND TROUT. *Am. Zool.* 31(5):74A. 1991. Abstract only. FR 37(2)

[Queens Univ., Kingston, ON, Canada] *Oncorhynchus mykiss.*

92-002644 Tullis, A.; B. A. Block and B. D. Sidell. ACTIVITIES OF KEY METABOLIC ENZYMES IN THE HEATER ORGANS OF SCOMBROID FISHES. *Am. Zool.* 31(5):56A. 1991. Abstract only. FR 37(2)

[Univ. Chicago, Chicago, IL] *Xiphias gladius, Makaira nigricans, Tetrapturus audax,* and *T. pfluegeri.*

92-002645 van den Hurk, R. and J. W. Resink. MALE REPRODUCTIVE SYSTEM AS SEX PHEROMONE PRODUCER IN TELEOST FISH. *J. Exp. Zool.* 261(2):204-213. 1992. FR 37(2)

[Dep. Vet. Anat., Univ. Utrecht, 3508 TD Utrecht, Netherlands] *Brachydanio rerio* and *Clarias gariepinus.*

92-002646 Van der Boon, Jeroen; Francis A. Eelkema, Guido E. E. J. M. Van den Thillart and Albert D. F. Addink. INFLUENCE OF ANOXIA ON FREE AMINO ACID LEVELS IN BLOOD, LIVER AND SKELETAL MUSCLES OF THE GOLDFISH, *CARASSIUS AURATUS* L. *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):193-198. 1992. FR 37(2)

[State Univ. Leiden, Dep. Anim. Physiol., Gorlaeus Lab., P.O. Box 9502, 2300 RA Leiden, Netherlands]

92-002647 van Vliet, K. J. and P. J. Fripp. SOME CHEMICAL AND PHYSICAL PROPERTIES OF THE MILT OF THE FRESHWATER TELEOST, *BARBUS KIMBERLEYENSIS. Comp. Biochem. Physiol. A Comp. Physiol.* 101(3):589-595. 1992. FR 37(2)

[Dep. Microbiol., Div. Parasitol., Med. Univ. Southern Africa, P.O. Medunsa 0204, South Africa]

92-002648 Venkatesh, B.; C. H. Tan and T. J. Lam. STEROID PRODUCTION BY OVARIAN FOLLICLES OF THE VIVIPAROUS GUPPY (*POECILIA RETICULATA*) AND ITS REGULATION BY PRECURSOR SUBSTRATES, DIBUTYRYL cAMP AND FORSKOLIN. *Gen. Comp. Endocrinol.* 85(3):450-461. 1992. FR 37(2)

[Tan: Lab. Hormone Res., Dep. Zool., Natl. Univ. Singapore, 0511, Singapore]

PHYSIOLOGY (Continued)

92-002649 Ventrella, Vittoria; Fabiana Trombetti; Alessandra Pagliarani; Gianni Trigari; Maurizio Pirini and Anna Rosa Borgatti. SALINITY DEPENDENCE OF THE OUABAIN-INSENSITIVE Mg^{2+}-DEPENDENT Na^{+}-ATPASE IN GILLS OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS* WALBAUM) ADAPTED TO FRESH AND BRACKISH WATER. *Comp. Biochem. Physiol. B Comp. Biochem.* 101(1/2):1-7. 1992. FR 37(2)
[Dep. Biochem., Univ. Bologna via Belmelora 8/2, Bologna, Italy]

92-002650 Vera, Maria Ines; Francisco Romero; Rodolfo Amthauer; Jaime Figueroa; Oscar Goicoechea; Gloria Leon and Manuel Krauskopf. CARP APOLIPOPROTEIN A-I INTESTINAL ABSORPTION AND TRANSFER INTO THE SYSTEMIC CIRCULATION DURING THE ACCLIMATIZATION OF THE CARP (*CYPRINUS CARPIO*). *Comp. Biochem. Physiol. A Comp. Physiol.* 101(3):573-581. 1992. FR 37(2)
[Krauskopf: Inst. Bioquim. & Inst. Embriol., Fac. Cienc., Univ. Austral Chile, Valdivia, Chile]

92-002651 Wang, S. W. and S. A. Sower. FUNCTIONAL ANATOMICAL RELATIONSHIP BETWEEN THE HYPOTHALAMUS AND ADENOHYPOPHYSIS IN SEA LAMPREY: DIFFUSION HYPOTHESIS. *Am. Zool.* 31(5):20A. 1991. Abstract only. FR 37(2)
[Univ. N.H., Durham] *Petromyzon marinus.*

92-002652 Watt, P. W.; T. Baird; N. J. Wood and A. A. Harper. THE EFFECT OF TEMPERATURE ACCLIMATION ON CARDIAC PACEMAKER ACTIVITY OF THE CARP (*CYPRINUS CARPIO*) HEART MEASURED *IN VITRO*. *J. Physiol. (Camb.)* Vol. 446. p. 49. 1992. FR 37(2)
[Dep. Anat. & Physiol., Univ. Dundee, Dundee DD1 4HN, Scotland]

92-002653 Weber, Gregory M.; Darren K. Okimoto; N. Harold Richman III and E. Gordon Grau. PATTERNS OF THYROXINE AND TRIIODOTHYRONINE IN SERUM AND FOLLICLE-BOUND OOCYTES OF THE TILAPIA, *OREOCHROMIS MOSSAMBICUS*, DURING OOGENESIS. *Gen. Comp. Endocrinol.* 85(3):392-404. 1992. FR 37(2)
[Dep. Zool. & Inst. Mar. Biol., Univ. Hawaii, Honolulu 96822]

92-002654 Wetherbee, Bradley M. BUOYANCY OF DEEP-SEA SHARKS. *Pac. Sci.* 46(1):105. 1992. Abstract only. FR37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-002655 Whalen, R. and M. H. Taylor. OOCYTE MATURATION INDUCING SUBSTANCES (MIS) IN *FUNDULUS HETEROCLITUS*. *Am. Zool.* 31(5):68A. 1991. Abstract only. FR 37(2)
[Univ. Del., Newark]

92-002656 Wieser, Wolfgang; Gerhard Krumschnabel and Julius P. Ojwang- Okwor. THE ENERGETICS OF STARVATION AND GROWTH AFTER REFEEDING IN JUVENILES OF THREE CYPRINID SPECIES. *Environ. Biol. Fishes* 33(1-2):63-71. 1992. FR 37(2)
[Inst. Zool., Univ. Innsbruck, Technikerstr. 25, A-6020 Innsbruck, Austria] *Leuciscus cephalus, Chalcalburnus chalcoides mento,* and *Scardinius erythrophthalmus.*

92-002657 Wilson, R. and S. Egginton. CARDIOVASCULAR RESPONSES IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) TO AEROBIC EXERCISE. *J. Physiol. (Camb.)* Vol. 446. p. 192. 1992. FR 37(2)
[Dep. Physiol., Univ. Birmingham Med. School, Birmingham B15 2TT, England]

92-002658 Winberg, Svante; Goran E. Nilsson and K. Hakan Olsen. CHANGES IN BRAIN SEROTONERGIC ACTIVITY DURING HIERARCHIC BEHAVIOR IN ARCTIC CHARR (*SALVELINUS ALPINUS* L.) ARE SOCIALLY INDUCED. *J. Comp. Physiol. A Sens. Neural Behav. Physiol.* 170(1):93-99. 1992. FR 37(2)
[Dep. Zoophysiol., Uppsala Univ., Box 560, S-751 22 Uppsala, Sweden]

92-002659 Winter, E. L. FUNCTIONAL DIFFERENCES IN MUSCLE TYPE LACTATE DEHYDROGENASE (LDH) IN FISHES OF THE GENUS *GILLICHTHYS* (GOBIIDAE). *Am. Zool.* 31(5):58A. 1991. Abstract only. FR 37(2)
[Scripps Inst. Oceanogr., Univ. Calif., San Diego, La Jolla] *G. mirabilis* and *G. seta.*

92-002660 Xiong, Fei and Choy L. Hew. CHINOOK SALMON (*ONCORHYNCHUS TSCHAWYTSCHA*) GONADOTROPIN IIβ SUBUNIT GENE ENCODES MULTIPLE MESSENGER RIBONUCLEIC ACIDS. *Can. J. Zool.* 69(10):2572-2578. 1991. In English with French summ. FR 37(2)
[Hew: Dep. Clinical Biochem. & Biochem., Univ. Toronto, Toronto, ON, Canada M5G 1L5]

92-002661 Yamada, M.; M. B. A. Djamgoz; J. C. Low; T. Furukawa and S. Yasui. DYNAMIC CHARACTERISTICS OF MULTIPLE CONE SYNAPTIC INPUT TO H1 HORIZONTAL CELLS IN CARP RETINA *IN VITRO*. *J. Physiol. (Camb.)* Vol. 446. p. 375. 1992. FR 37(2)
[Electrotechnical Lab., Tsukuba, Ibaraki 305, Japan] *Cyprinus carpio.*

92-002662 Yamamoto, T. S. and W. Kobayashi. CLOSURE OF THE MICROPYLE DURING EMBRYONIC DEVELOPMENT OF SOME PELAGIC FISH EGGS. *J. Fish Biol.* 40(2):225-241. 1992. FR 37(2)
[Zool. Inst., Fac. Sci., Hokkaido Univ., Sapporo 060, Japan] *Paralichthys olivaceus, Theragra chalcogramma, Branchiostegus japonicus,* and *Pagrus major.*

PHYSIOLOGY (Continued)

92-002663 Yamashita, Michiaki and Shiro Konagaya. PROTEOLYSIS OF MUSCLE PROTEINS IN THE EXTENSIVELY SOFTENED MUSCLE OF CHUM SALMON CAUGHT DURING SPAWNING MIGRATION. *Nippon Suisan Gakkaishi* 57(11):2163. 1991. In English with Japanese summ. FR 37(2)

[Natl. Res. Inst. Fish. Sci., Kachidoki, Chuo, Tokyo 104, Japan] *Oncorhynchus keta.*

92-002664 Yasumasu, Shigeki; Shigetaka Katow; Tatsuo S. Hamazaki; Ichiro Iuchi and Kenjiro Yamagami. TWO CONSTITUENT PROTEASES OF A TELEOSTEAN HATCHING ENZYME: CONCURRENT SYNTHESES AND PACKAGING IN THE SAME SECRETORY GRANULES IN DISCRETE ARRANGEMENT. *Dev. Biol.* 149(2):349-356. 1992. FR 37(2)

[Yamagami: Life Sci. Inst., Sophia Univ., 7-1 Kioicho, Chiyoda-ku, Tokyo 102, Japan] *Oryzias latipes.*

92-002665 Zaporozhets, O. M. ESTIMATES OF THE PHYSIOLOGICAL CONDITION OF YOUNG SALMON ACCORDING TO ABILITY TO SWIM IN A HYDRODYNAMIC CHAMBER. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):42-46. 1991. FR 37(2)

[Kamchatka Sect., Pac. Ocean Sci. Res. Inst. Fish. & Oceanogr. (KoTINRO), Petropavlovsk-Kamchatka, USSR]

92-002666 Zaprudnova, R. A. CONCENTRATIONS OF IONS IN BLOOD PLASMA AND MUSCLE IN FRESHWATER FISH BEFORE DEATH. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):149-155. 1991. FR 37(2)

[Inst. Biol. Inland Waters (IBVV), USSR Acad. Sci., Borok, Yaroslavskaya Region, USSR] *Abramis brama, Rutilus rutilus,* and *Esox lucius* in the USSR.

92-002667 Zhang, Z. and N. W. Runham. TEMPORAL DEPOSITION OF INCREMENTAL AND DISCONTINUOUS ZONES IN THE OTOLITHS OF *OREOCHROMIS NILOTICUS* (L.). *J. Fish Biol.* 40(3):333-339. 1992. FR 37(2)

[Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002668 Zhang, Z. and N. W. Runham. EFFECTS OF FOOD RATION AND TEMPERATURE LEVEL ON THE GROWTH OF *OREOCHROMIS NILOTICUS* (L.) AND THEIR OTOLITHS. *J. Fish Biol.* 40(3):341-349. 1992. FR 37(2)

[Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002669 Zupanc, G. K. H.; L. Maler; J. A. Airey; J. L. Sutko and M. H. Ellisman. IMMUNOHISTOCHEMICAL LOCALIZATION OF RYANODINE BINDING PROTEINS IN THE CENTRAL NERVOUS SYSTEM OF GYMNOTIFORM FISH. *Am. Zool.* 31(5):16A. 1991. Abstract only. FR 37(2)

[Univ. Calif., San Diego]

GENETICS, VARIATION STUDIES AND HYBRIDIZATION

92-002670 Ahmad, Taufik and Rudhy Gustiano. GYNOGENESIS AND ANDROGENESIS, THE PROMISING TOOLS FOR AQUACULTURE. *Indones. Agric. Res. Dev. J.* 12(1):10-16. 1990. FR 37(2)

92-002671 Arai, Katsutoshi; Kumi Matsubara and Ryo Suzuki. KARYOTYPE AND ERYTHROCYTE SIZE OF SPONTANEOUS TETRAPLOIDY AND TRIPLOIDY IN THE LOACH *MISGURNUS ANGUILLICAUDATUS. Nippon Suisan Gakkaishi* 57(12):2167-2172. 1991. In English with Japanese summ. FR 37(2)

[Fac. Appl. Biol. Sci., Hiroshima Univ., Higashi-Hiroshima, Hiroshima 724, Japan]

92-002672 Arai, Katsutoshi; Kumi Matsubara and Ryo Suzuki. CHROMOSOMES AND DEVELOPMENTAL POTENTIAL OF PROGENY OF SPONTANEOUS TETRAPLOID LOACH *MISGURNUS ANGUILLICAUDATUS. Nippon Suisan Gakkaishi* 57(12):2173-2178. 1991. In English with Japanese summ. FR 37(2)

[Fac. Appl. Biol. Sci., Hiroshima Univ., Higashi-Hiroshima, Hiroshima 724, Japan]

92-002673 Avise, John C. MOLECULAR POPULATION STRUCTURE AND THE BIOGEOGRAPHIC HISTORY OF A REGIONAL FAUNA: A CASE HISTORY WITH LESSONS FOR CONSERVATION BIOLOGY. *Oikos* 63(1):62-76. 1992. FR 37(2)

[Dep. Genet., Univ. Ga., Athens 30602] Data for 19 species

92-002674 Avise, John C.; Joel C. Trexler; Joseph Travis and William S. Nelson. *POECILIA MEXICANA* IS THE RECENT FEMALE PARENT OF THE UNISEXUAL FISH *P. FORMOSA. Evolution* 45(6):1530-1533. 1991. FR 37(2)

[Dep. Genet., Univ. Ga., Athens 30602] *P. latipinna* in Texas and Mexico.

92-002675 Balon, Eugene K. HOW DAMS ON THE RIVER DANUBE MIGHT HAVE CAUSED HYBRIDIZATION AND INFLUENCED THE APPEARANCE OF A NEW CYPRINID TAXON. *Environ. Biol. Fishes* 33(1-2):167-180. 1992. FR 37(2)

[Inst. Ichthyol., Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Vimba vimba* x *Blicca bjoerkna,* and *Gobio albipinnatus* in Austria.

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002676 Beacham, Terry D. and Nataly V. Varnavskaya. EFFECT OF PARENTAL HETEROZYGOSITY ON PINK SALMON *(ONCORHYNCHUS GORBUSCHA)* EMBRYONIC AND ALEVIN SURVIVAL AND DEVELOPMENT AT EXTREME TEMPERATURES. *Can. J. Zool.* 69(9):2485-2489. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002677 Beckenbach, Andrew T. RAPID mtDNA SEQUENCE ANALYSIS OF FISH POPULATIONS USING THE POLYMERASE CHAIN REACTION (PCR). *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):95-98. 1991. In English with French summ. FR 37(2)
[Dep. Biol. Sci. & Inst. Mol. Biol. & Biochem., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6]

92-002678 Bergin, Joseph D. AN EVALUATION OF FIVE STRAINS OF BROWN TROUT. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 66-71. 1990. FR 37(2)
[Div. Fish. & Wildl., Field Headquarters, Westboro, MA 01581] *Salmo trutta.*

92-002679 Bernardi, Giacomo and Giorgio Bernardi. COMPOSITIONAL TRANSITIONS IN THE NUCLEAR GENOMES OF COLD-BLOODED VERTEBRATES. *J. Mol. Evol.* 31(4):282-293. 1990. FR 37(2)
[Giorgio Bernardi: Lab. Genet. Mol., Inst. Jacques Monod, Tour 43, 2 Pl. Jussieu, 75005 Paris, France]

92-002680 Bernardi, Giacomo and Giorgio Bernardi. COMPOSITIONAL PATTERNS IN THE NUCLEAR GENOME OF COLD-BLOODED VERTEBRATES. *J. Mol. Evol.* 31(4):265-281. 1990. FR 37(2)
[Giorgio Bernardi: Lab. Genet. Mol., Inst. Jacques Monod, Tour 43, 2 Pl. Jussieu, 75005 Paris, France]

92-002681 Billington, Neil and Paul D. N. Hebert. MITOCHONDRIAL DNA DIVERSITY IN FISHES AND ITS IMPLICATIONS FOR INTRODUCTIONS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):80-94. 1991. In English with French summ. FR 37(2)
[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002682 Blanco, G.; J. A. Sanchez; E. Vazquez; J. Rubio and F. M. Utter. GENETIC DIFFERENTIATION AMONG NATURAL EUROPEAN POPULATIONS OF ATLANTIC SALMON, *SALMO SALAR* L., FROM DRAINAGES OF THE ATLANTIC OCEAN. *Anim. Genet.* 23(1):11-18. 1992. FR 37(2)
[Dep. Biol., Funcional (Genet.), Fac. Med., Univ. Oviedo, 33071 Oviedo, Spain]

92-002683 Blouw, D. M. and G. J. Boyd. INHERITANCE OF REDUCTION, LOSS, AND ASYMMETRY OF THE PELVIS IN *PUNGITIUS PUNGITIUS* (NINESPINE STICKLEBACK). *Heredity* 68(1):33-42. 1992. FR 37(2)
[Dep. Biol., St. Francis Xavier Univ., Antigonish, NS, Canada B2G 1C0]

92-002684 Burkhead, Noel M. and James D. Williams. AN INTERGENERIC HYBRID OF A NATIVE MINNOW, THE GOLDEN SHINER, AND AN EXOTIC MINNOW, THE RUDD. *Trans. Am. Fish. Soc.* 120(6):781-795. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent., 7920 Northwest 71st St., Gainesville, FL 32606] *Notemigonus crysoleucas* x *Scardinius erythrophthalmus.*

92-002685 Cauvin, E.; G. Forneris and R. Rasero. ELECTROPHORETIC RESEARCH ON ONTOGENIC VARIABILITY IN *SALMO TRUTTA MARMORATUS. World Vet. Congress (Montreal)* No. 33. 1987. From Ann. Fac. Med. Vet. Torino No. 32. p. 189. 1987. FR 37(2)

92-002686 Cestari, Marta M. and Pedro M. Galetti, Jr. CHROMOSOME STUDIES OF *SERRASALMUS SPILOPLEURA* (CHARACIDAE, SERRASALMINAE) FROM THE PARANA-PARAGUAY RIVERS: EVOLUTIONARY AND CYTOTAXONOMIC CONSIDERATIONS. *Copeia* 1992(1):108-112. 1992. In English with Portuguese summ. FR 37(2)
[Dep. Genet., Univ. Fed. Sao Carlos, 13560-Sao Carlos, Sao Paulo, Brazil]

92-002687 Cezilly, F.; B. Brun and H. Hafner. FORAGING AND FITNESS. *Acta Oecol. Int. J. Ecol.* 12(5):683-696. 1991. FR 37(2)
[Lab. Biometrie, Cent. Ecol. Fonctionnelle & Evol., CNRS, 34200 Montpellier Cedex, France]

92-002688 Chen, T. T.; C. M. Lin; Z. Zhu; L. I. Gonzalez-Villasenor; R. A. Dunham and D. A. Powers. GENE TRANSFER, EXPRESSION AND INHERITANCE OF RAINBOW TROUT AND HUMAN GROWTH HORMONE GENES IN CARP AND LOACH. In *Transgenic Models in Medicine and Agriculture. UCLA Symp. Mol. Cell Biol.* No. 116. p. 127-139. 1990. From Anim. Breeding Abstr. 59(11):7995. 1991. FR 37(2)
[Cent. Mar. Biotechnol., Univ. Md. Syst., Baltimore 21202] *Misgurnus fossilis, Oncorhynchus mykiss* and *Cyprinus carpio.*

92-002689 Chourrout, D.; R. Guyomard and L. M. Houdebine. TECHNIQUES FOR THE DEVELOPMENT OF TRANSGENIC FISH: A REVIEW. In *Transgenic Models in Medicine and Agriculture. UCLA Symp. Mol. Cell. Biol.* No. 116. p. 89-99. 1990. From Anim. Breeding Abstr. 59(11):7996. 1991. FR 37(2)
[Lab. Fish Genet., 78350 Jouy-en-Josas, France]

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002690 Clayton, G. M. and D. J. Price. INTERSPECIFIC AND INTRASPECIFIC VARIATION IN RESISTANCE TO ICHTHYOPHTHIRIASIS AMONG POECILIID AND GOODEID FISHES. *J. Fish Biol.* 40(3):445-453. 1992. FR 37(2)

[Price: Dep. Biol. Sci., Polytechnic South West, Drake Circus, Plymouth PL4 8AA, England] *Ameca splendens, Ilyodon xantusi, Xiphophorus maculatus,* and *X. variatus.*

92-002691 Claytor, R. R. and E. Verspoor. DISCORDANT PHENOTYPIC VARIATION IN SYMPATRIC RESIDENT AND ANADROMOUS ATLANTIC SALMON (*SALMO SALAR*) POPULATIONS. *Can. J. Zool.* 69(11):2846-2852. 1991. In English with French summ. FR 37(2)

[Sci. Branch, Dep. Fish. & Oceans, P.O. Box 5030, Moncton, NB, Canada E1C 9B6]

92-002692 Cook, Joseph A.; Kevin R. Bestgen; David L. Propst and Terry L. Yates. ALLOZYMIC DIVERGENCE AND SYSTEMATICS OF THE RIO GRANDE SILVERY MINNOW, *HYBOGNATHUS AMARUS* (TELEOSTEI: CYPRINIDAE). *Copeia* 1992(1):36-44. 1992. FR 37(2)

[Univ. Alaska Mus., 907 Yukon Dr., Fairbanks 99775-1200]

92-002693 Crandell, Patricia Ann. THE GENETICS OF BODY WEIGHT AND AGE AND WEIGHT AT SEXUAL MATURITY IN INDIVIDUALLY TAGGED RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Ph.D. dissertation, Univ. Calif. (Davis)* 77p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4575. 1992. Order No. DA9206219. FR 37(2)

92-002694 Cross, T. F.; C. P. R. Mills and M. de Courcy Williams. AN INTENSIVE STUDY OF ALLOZYME VARIATION IN FRESHWATER RESIDENT AND ANADROMOUS TROUT, *SALMO TRUTTA* L., IN WESTERN IRELAND. *J. Fish Biol.* 40(1):25-32. 1992. FR 37(2)

[Dep. Zool., Lee Maltings, Prospect Row, Univ. Coll., Cork, Ireland]

92-002695 Davies, P. L.; C. L. Hew; M. A. Shears and G. L. Fletcher. ANTIFREEZE PROTEIN EXPRESSION IN TRANSGENIC SALMON. In *Transgenic Models in Medicine and Agriculture. UCLA Symp. Mol. Cell. Biol.* No. 116. p. 141-161. 1990. From Anim. Breeding Abstr. 59(11):7997. 1991. FR 37(2)

[Dep. Biochem., Queen's Univ., Kingston, ON, Canada K7L 3N6] *Salmo salar* and *Pleuronectes americanus.*

92-002696 Dawley, R. and A. Yeakel. LOW CLONAL DIVERSITY AMONG UNISEXUAL HYBRIDS OF THE KILLIFISHES *FUNDULUS HETEROCLITUS* AND *F. DIAPHANUS*. *Am. Zool.* 31(5):49A. 1991. Abstract only. FR 37(2)

[Ursinus Coll., Collegeville, PA]

92-002697 DeMarais, Bruce D.; Thomas E. Dowling; Michael E. Douglas; W. L. Minckley and Paul C. Marsh. ORIGIN OF *GILA SEMINUDA* (TELEOSTEI: CYPRINIDAE) THROUGH INTROGRESSIVE HYBRIDIZATION: IMPLICATIONS FOR EVOLUTION AND CONSERVATION. *Proc. Natl. Acad. Sci. U.S.A.* 89(7):2747-2751. 1992. FR 37(2)

[Dep. Zool., Ariz. State Univ., Tempe 85287-1501] *G. elegans* x *G. robusta robusta* in Nevada.

92-002698 Doyle, R. W.; N. L. Shackel; Z. Basiao; S. Uraiwan; T. Matricia and A. J. Talbot. SELECTIVE DIVERSIFICATION OF AQUACULTURE STOCKS: A PROPOSAL FOR ECONOMICALLY SUSTAINABLE GENETIC CONSERVATION. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):148-154. 1991. In English with French summ. FR 37(2)

[Dep. Biol., Dalhousie Univ., Halifax, NS, Canada B3H 4J1]

92-002699 Echelle, Anthony A. and Thomas E. Dowling. MITOCHONDRIAL DNA VARIATION AND EVOLUTION OF THE DEATH VALLEY PUPFISHES (*CYPRINODON*, CYPRINODONTIDAE). *Evolution* 46(1):193-206. 1992. FR 37(2)

[Zool. Dep., Okla. State Univ., Stillwater 74078] Data for 16 species in Nevada and California.

92-002700 Echelle, Anthony A. CONSERVATION GENETICS AND GENIC DIVERSITY IN FRESHWATER FISHES OF WESTERN NORTH AMERICA. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and and James E. Deacon, editors.* p. 141-153. 1991. FR 37(2)

[Okla. State Univ., Dep. Zool., Stillwater 74074] Data for 28 species.

92-002701 Edge, Thomas A.; Don E. McAllister and Sami U. Qadri. MERISTIC AND MORPHOMETRIC VARIATION BETWEEN THE ENDANGERED ACADIAN WHITEFISH, *COREGONUS HUNTSMANI*, AND THE LAKE WHITEFISH, *COREGONUS CLUPEAFORMIS*, IN THE CANADIAN MARITIME PROVINCES AND THE STATE OF MAINE, USA. *Can. J. Fish. Aquat. Sci.* 48(11):2140-2151. 1991. In English with French summ. FR 37(2)

[Dep. Biol., Univ. Ottawa, Ottawa, ON, Canada K1N 6N5]

92-002702 Faber, Joseph E. INTERSPECIFIC COMPARISONS OF INTERPOPULATIONAL GENETIC DIFFERENTIATIONS IN STREAM FISHES (PERCIDAE: ETHEOSTOMATINI). *Ohio J. Sci.* 92(2):13. 1992. Abstract only. FR 37(2)

[Dep. Zool., Irvine Hall, Ohio Univ., Athens 45701] *Etheostoma nigrum* and *E. flabellare* in Ohio.

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002703 Ferguson, Moira M.; Peter E. Ihssen and Julian D. Hynes. ARE CULTURED STOCKS OF BROWN TROUT (*SALMO TRUTTA*) AND RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) GENETICALLY SIMILAR TO THEIR SOURCE POPULATIONS? *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):118-123. 1991. In English with French summ. FR 37(2)

[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002704 Forbes, S. H. and F. W. Allendorf. MITOCHONDRIAL GENOTYPES HAVE NO DETECTABLE EFFECTS ON MERISTIC TRAITS IN CUTTHROAT TROUT HYBRID SWARMS. *Evolution* 45(6):1350-1359. 1991. FR 37(2)

[Div. Biol. Sci., Univ. Mont., Missoula 59812] *Oncorhynchus clarki lewisi* and *O. c. bouvieri.*

92-002705 Forbes, S. H. and F. W. Allendorf. ASSOCIATIONS BETWEEN MITOCHONDRIAL AND NUCLEAR GENOTYPES IN CUTTHROAT TROUT HYBRID SWARMS. *Evolution* 45(6):1332-1349. 1991. FR 37(2)

[Div. Biol. Sci., Univ. Mont., Missoula 59812] *Oncorhynchus clarki lewisi* and *O. c. bouvieri.*

92-002706 Fornzler, Dorothee; Joachim Wittbrodt and Manfred Schartl. ANALYSIS OF AN ESTERASE LINKED TO A LOCUS INVOLVED IN THE REGULATION OF THE MELANOMA ONCOGENE AND ISOLATION OF POLYMORPHIC MARKER SEQUENCES IN *XIPHOPHORUS. Biochem. Genet.* 29(11-12):509-524. 1991. FR 37(2)

[Schartl: Dep. Physiol. Chem. I, Biocent., Univ. Wurzburg, Am Hubland, W-8700 Wurzburg, Germany] *X. maculatus* and *X. helleri.*

92-002707 Gajardo, Gonzalo M. KARYOTYPES OF *BASILICHTHYS MICROLEPIDOTUS* AND *B. AUSTRALIS* (PISCES: ATHERINIDAE). *Copeia* 1992(1):256-258. 1992. FR 37(2)

[Inst. Profesional Osorno, P.O. Box 933, Osorno, Chile]

92-002708 Garcia-Vazquez, E.; A. M. Pendas and P. Moran. CHROMOSOME POLYMORPHISM IN WILD ATLANTIC SALMON, *SALMO SALAR* L., FROM ASTURIAS, NORTHERN SPAIN. *Aquacult. Fish. Manage.* 23(1):95-101. 1992. FR 37(2)

[Dep. Biol. Func. (Area Genet.), Univ. Oviedo, 33071 Oviedo, Spain]

92-002709 Giles, M. A. STRAIN DIFFERENCES IN HEMOGLOBIN POLYMORPHISM, OXYGEN CONSUMPTION, AND BLOOD OXYGEN EQUILIBRIA IN THREE HATCHERY BROODSTOCKS OF ARCTIC CHARR, *SALVELINUS ALPINUS. Fish Physiol. Biochem.* 9(4):291-301. 1991. FR 37(2)

[Dep. Fish. & Oceans, Freshwater Inst., 501 University Crescent, Winnipeg, MB, Canada R3T 2N6]

92-002710 Gillespie, Robert B.; Charles F. Facemire and Sheldon I. Guttman. CRYPTIC VARIATION IN ELECTROPHORETICALLY-DETECTED ALLOZYMES OF CADDISFLY LARVAE (*HYDROPSYCHE SIMULANS, HYDROPSYCHE BIFIDA*) AND SPOTFIN SHINERS (*NOTROPIS SPILOPTERUS*): IMPLICATIONS FOR ALLELE AND GENOTYPE DETERMINATIONS. *Biochem. Syst. Ecol.* 19(7):541-548. 1991. FR 37(2)

[Dep. Biol. Sci., Purdue Univ., Fort Wayne, IN 46805-1499]

92-002711 Ginatulina, L. K. GENETIC DIFFERENTIATION AMONG CHUM SALMON, *ONCORHYNCHUS KETA* (WALBAUM), FROM PRIMORYE AND SAKHALIN. *J. Fish Biol.* 40(1):33-38. 1992. FR 37(2)

[Inst. Biol. & Soil Sci., Far East Branch USSR Acad. Sci., Vladivostok 690022, USSR]

92-002712 Gjedrem, Trygve. BREEDING PLANS FOR RAINBOW TROUT. *Aquaculture* 100(1-3):73-83. 1992. FR 37(2)

[AKVAFORSK, Inst. Aquacult. Res., c/o NLH, N-1432 As, Norway] *Oncorhynchus mykiss.*

92-002713 Gong, Yeong; Yeong Chull Park and Soon Song Kim. [STUDY ON THE MANAGEMENT UNIT OF FISHERIES RESOURCES BY GENETIC METHOD: I. GENETIC SIMILARITY OF PACIFIC COD IN THE NORTH PACIFIC.] *Bull. Natl. Fish. Res. Dev. Agency* No. 45. p. 47-61. 1991. In Korean. From Korean Sci. Abstr. 23(6):2329. 1991. FR 37(2)

Gadus macrocephalus.

92-002714 Gorshkov, Sergey A. and Galina V. Gorshkova. APPLICATION OF CHROMOSOME MANIPULATION IN AQUACULTURE OF RAINBOW TROUT IN THE BALTIC SEA REGION, USSR. *Aquaculture* 100(1-3):99-100. 1992. Abstract only. FR 37(2)

[Baltic Sci. Res. Inst. Fish., Riga, Latuia] *Oncorhynchus mykiss.*

92-002715 Grachev, M. A.; S. Ja. Slobodyanyuk; N. G. Kholodilov; S. P. Fyodorov; S. I. Belikov; D. Yu. Sherbakov; V. G. Sideleva; A. A. Zubin and V. V. Kharchenko. COMPARATIVE STUDY OF TWO PROTEIN-CODING REGIONS OF MITOCHONDRIAL DNA FROM THREE ENDEMIC SCULPINS (COTTOIDEI) OF LAKE BAIKAL. *J. Mol. Evol.* 34(1):85-90. 1992. FR 37(2)

[Limnol. Inst., Siberian Div. Acad. Sci. USSR, Irkutsk, USSR] *Cottus kessleri, Cottocomephorus grewingki,* and *C. inermis* in the USSR.

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002716 Grande, L. and W. E. Bemis. CURRENT STUDIES ON FOSSIL AND RECENT AMIFORM FISHES. *Am. Zool.* 31(5):61A. 1991. Abstract only. FR 37(2)

[Field Mus. Nat. Hist., Chicago, IL] *Amia calva.*

92-002717 Grewe, Peter Martin. TEMPORAL AND SPATIAL VARIABILITY OF ALLOZYME AND MITOCHONDRIAL DNA MARKERS AMONG SAMPLES OF NATURALLY PRODUCED LAKE TROUT (*SALVELINUS NAMAYCUSH*) FRY COLLECTED FROM LAKE ONTARIO. *Ph.D. dissertation, Cornell Univ.* 89p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4013. 1992. Order No. DA9203929. FR 37(2)

92-002718 Harrell, R. M. RETROSPECTIVE INSIGHT TO STRIPED BASS CULTURE AND MANAGEMENT IN THE CANADIAN MARITIMES. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 61-63. 1991. FR 37(2)

[Univ. Md. Syst., Cent. Environ. & Estuarine Studies, P.O. Box 775, Cambridge 21613] *Morone saxatilis.*

92-002719 Hartley, S. E.; S. E. Bartlett and W. S. Davidson. MITOCHONDRIAL DNA ANALYSIS OF SCOTTISH POPULATIONS OF ARCTIC CHARR, *SALVELINUS ALPINUS* (L.). *J. Fish Biol.* 40(2):219-224. 1992. FR 37(2)

[Dep. Biol. & Mol. Sci., School Nat. Sci., Univ. Stirling, Stirling FK9 4LA, Scotland]

92-002720 Heagler, Mary Gay. SHIFTS IN ALLOZYME GENOTYPE OF MOSQUITOFISH DURING MERCURY EXPOSURE. *Ph.D. dissertation, Rutgers State Univ. N.J. (New Brunswick)* 97p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4103. 1992. Order No. DA9200226. FR 37(2)

Gambusia affinis.

92-002721 Hershberger, William K. GENETIC VARIABILITY IN RAINBOW TROUT POPULATIONS. *Aquaculture* 100(1-3):51-71. 1992. FR 37(2)

[School Fish., WH-10, Univ. Wash., Seattle 98195] *Oncorhynchus mykiss.*

92-002722 Holland, N. D.; L. Z. Holland; C. A. Davis and Y. Honma. EXPRESSION DOMAINS OF ENGRAILED GENE IN LAMPREY EMBRYOS. *Am. Zool.* 31(5):46A. 1991. Abstract only. FR 37(2)

[Scripps Inst. Oceanogr., La Jolla, CA] *Lampetra japonica.*

92-002723 Ivanenkov, V. V. and I. N. Kamshilin. ON THE POSSIBILITY OF USING THE ALBUMIN FRACTIONS OF STURGEONS AS GENETIC MARKERS FOR POPULATION STUDIES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):141-150. 1991. FR 37(2)

[Inst. Dev. Biol., USSR Acad. Sci. (IBR), Moscow, USSR] *Acipenser gueldenstaedti.*

92-002724 Joss, Jean M. P.; Naomi Cramp; Peter R. Baverstock and Alan M. Johnson. A PHYLOGENETIC COMPARISON OF 18S RIBOSOMAL RNA SEQUENCES OF LUNGFISH WITH THOSE OF OTHER CHORDATES. *Aust. J. Zool.* 39(5):509-518. 1991. FR 37(2)

[School Biol. Sci., Macquarie Univ., N.S.W. 2109, Australia] *Hydrolagus colliei, Calamoichthys calabaricus, Acipenser transmontanus, Lepisosteus spatula,* and *Neoceratodus forsteri.*

92-002725 Kartavtsev, Y. P. ALLOZYME HETEROZYGOSITY AND MORPHOLOGICAL HOMEOSTASIS IN PINK SALMON, *ONCORHYNCHUS GORBUSCHA* (WALBAUM): EVIDENCES FROM FAMILY ANALYSIS. *J. Fish Biol.* 40(1):17-24. 1992. FR 37(2)

[Inst. Mar. Biol., Far East Div. USSR Acad. Sci., Vladivostok 690032, USSR]

92-002726 Kartavtsev, Yu. F. TEMPORAL AND SPATIAL VARIABILITY IN ALLELIC FREQUENCIES IN POPULATIONS OF PINK SALMON, *ONCORHYNCHUS GORBUSCHA. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):87-98. 1991. FR 37(2)

[Inst. Mar. Biol., Far East. Branch, USSR Acad. Sci., Vladivostok, USSR]

92-002727 Kerby, J. Howard; James G. Geiger; Reginal M. Harrell; Charles C. Starling and Harrell Revels. RELATIVE GROWTH AND SURVIVAL BETWEEN TRIPLOID AND DIPLOID PALMETTO AND SUNSHINE STRIPED BASS TO PHASE II. *J. World Aquacult. Soc.* 22(3):32A-33A. 1991. Abstract only. FR 37(2)

[Natl. Fish. Res. Cent., U.S. Fish & Wildl. Serv., Box 700, Kearneysville, WV 25430] *Morone saxatilis* and *M. chrysops.*

92-002728 Kirpichnikov, V. S. ADAPTIVE NATURE OF INTRAPOPULATIONAL BIOCHEMICAL POLYMORPHISM IN FISH. *J. Fish Biol.* 40(1):1-16. 1992. FR 37(2)

[Inst. Cytol., Acad. Sci., Leningrad 194064, Tikhoretsky Ave. 4, USSR]

92-002729 Kitamura, S.; H. Ogata and H. Onozato. TRIPLOID MALE MASU SALMON *ONCORHYNCHUS MASOU* SHOWS NORMAL COURTSHIP BEHAVIOR. *Nippon Suisan Gakkaishi* 57(11):2157. 1991. In English with Japanese summ. FR 37(2)

[Inland Stn., Natl. Res. Inst. Aquacult., Tamaki, Mie 519-04, Japan]

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002730 Klinkhardt, Manfred B. and Barbel Buuk. [KARYOLOGICAL STUDIES IN SEVERAL SPECIES OF FRESHWATER FISHES FROM BRACKISH COASTAL WATERS OF SOUTH WESTERN BALTIC. IV. THE PERCH (*PERCA FLUVIATILIS* LINNAEUS, 1758).] *Zool. Anz.* 227(1/2):38-43. 1991. In German with English summ. FR 37(2)

[Fachbereich Biol., Univ. Rostock, WB Fischereibiol., Universitatsplatz 5, 0-2500 Rostock, Germany]

92-002731 Le Brun, Nathalie; Francois Renaud; Patrick Berrebi and Alain Lambert. HYBRID ZONES AND HOST-PARASITE RELATIONSHIPS: EFFECT ON THE EVOLUTION OF PARASITIC SPECIFICITY. *Evolution* 46(1):56-61. 1992. FR 37(2)

[Lab. Parasitol. Comp., Univ. Montpellier II, Sci. & Tech. Languedoc, Pl. E. Bataillon, 34095 Montpellier Cedex 5, France] *Barbus meridionalis* and *B. barbus* in France.

92-002732 Legendre, M.; G. G. Teugels; C. Cauty and B. Jalabert. A COMPARATIVE STUDY ON MORPHOLOGY, GROWTH RATE AND REPRODUCTION OF *CLARIAS GARIEPINUS* (BURCHELL, 1822), *HETEROBRANCHUS LONGIFILIS* VALENCIENNES, 1840, AND THEIR RECIPROCAL HYBRIDS (PISCES, CLARIIDAE). *J. Fish Biol.* 40(1):59-79. 1992. FR 37(2)

[Cent. ORSTOM, BP 5045, F-34032 Montpellier Cedex 1, France]

92-002733 Li, Yucheng and John R. Gold. CYTOGENETIC STUDIES IN NORTH AMERICAN MINNOWS (CYPRINIDAE). XXII. CHROMOSOMAL NUCLEOLAR ORGANIZER REGIONS IN THE GENUS *PIMEPHALES*. *Can. J. Zool.* 69(11):2826-2830. 1991. In English with French summ. FR 37(2)

[Gold: Dep. Wildl. & Fish. Sci., Tex. A&M Univ., College Station 77843] *P. notatus, P. promelas, P. tenellus,* and *P. vigilax.*

92-002734 Li, Yucheng; John R. Gold; Douglas Tave; Michael D. Gibson; Jimmy Barnett; Donald H. Fiegel and Berry F. Beavers. A CYTOGENETIC ANALYSIS OF THE KARYOTYPES OF THE GOLDEN SHINER, *NOTEMIGONUS CRYSOLEUCAS*, THE RUDD, *SCARDINUS ERYTHROPHTHALMUS*, AND THEIR RECIPROCAL F_1 HYBRIDS. *J. Appl. Aquacult.* 1(2):79-87. 1991. FR 37(2)

[Gold: Dep. Wildl. & Fish. Sci., Tex. A&M Univ., College Station 77843]

92-002735 Linhart, Otomar; Martin Flajshans and Pavel Kvasnicka. INDUCED TRIPLOIDY IN THE COMMON CARP (*CYPRINUS CARPIO* L.): A COMPARISON OF TWO METHODS. *Aquat. Living Resour.* 4(3):139-145. 1991. In English with French summ. FR 37(2)

[Res. Inst. Fish Cult. & Hydrobiol., Dep. Fish Genet. & Breeding, 389 25 Vodnany, Czechoslovakia]

92-002736 Liskauskas, Arunas P. and Moira M. Ferguson. GENETIC VARIATION AND FITNESS: A TEST IN A NATURALIZED POPULATION OF BROOK TROUT (*SALVELINUS FONTINALIS*). *Can. J. Fish. Aquat. Sci.* 48(11):2152-2162. 1991. In English with French summ. FR 37(2)

[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002737 McLean, Ewen; Marianne D. Sadar; Robert H. Devlin; Lawrence M. Souza and Edward M. Donaldson. PROMOTION OF GROWTH IN DIPLOID AND TRIPLOID COHO SALMON WITH PARENTERAL DELIVERY OF A RECOMBINANT PORCINE SOMATOTROPIN. *Aquat. Living Resour.* 4(3):155-160. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, West Vancouver Lab., 4160 Marine Dr., West Vancouver, BC, Canada V7V 1N6] *Oncorhynchus kisutch.*

92-002738 McMillan, W. Owen. GENETIC RELATIONSHIPS WITHIN SPECIES COMPLEXES OF INDO-WEST PACIFIC BUTTERFLYFISHES. *Pac. Sci.* 46(1):99. 1992. Abstract only. FR 37(2)

[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822] *Chaetodon.*

92-002739 Meyer, Axel and Allan C. Wilson. ORIGIN OF TETRAPODS INFERRED FROM THEIR MITOCHONDRIAL DNA AFFILIATION TO LUNGFISH. *J. Mol. Evol.* 31(5):359-364. 1990. FR 37(2)

[Dep. Ecol. & Evol., SUNY, Stony Brook, NY 11794] *Latimeria chalumnae.*

92-002740 Myers, James M. and William K. Hershberger. A COMPARISON OF MEIOTIC AND INTERPLOID TRIPLOID RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) INCUBATION AND GROWTH PERFORMANCE. *J. World Aquacult. Soc.* 22(3):44A. 1991. Abstract only. FR 37(2)

[School Fish., Univ. Wash., Seattle 98195]

92-002741 Nakajima, Masamichi; Naohisa Kanda and Yoshihisa Fujio. FLUCTUATION OF GENE FREQUENCY IN SUB-POPULATIONS ORIGINATED FROM ONE GUPPY POPULATION. *Nippon Suisan Gakkaishi* 57(12):2223-2227. 1991. In English with Japanese summ. FR 37(2)

[Dep. Fish. Sci., Fac. Agric., Tohoku Univ., Sendai, Miyagi 981, Japan] *Poecilia reticulata.*

92-002742 Nedreaas, Kjell and Gunnar Naevdal. GENETIC STUDIES OF REDFISH (*SEBASTES* SPP.) ALONG THE CONTINENTAL SLOPES FROM NORWAY TO EAST GREENLAND. *J. Cons. Cons. Int. Explor. Mer* 48(2):173-186. 1991. FR 37(2)

[Inst. Mar. Res., P.O. Box 1870, Nordnes, N-5024 Bergen, Norway] *S. marinus, S. mentella,* and *S. viviparus.*

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002743 Nilsson, Eric E. and Joseph G. Cloud. DIPLOID/TRIPLOID RAINBOW TROUT CHIMERAS PRODUCED BY MICROINJECTING ISOLATED BLASTOMERES INTO RECIPIENT BLASTULAE. *Aquaculture* 100(1-3):327. 1992. Abstract only. FR 37(2)

[Dep. Biol. Sci., Univ. Idaho, Moscow 83843] *Oncorhynchus mykiss.*

92-002744 Nishimura, Hitoshi and Riichi Kusuda. [PRESENCE OF C3 RECEPTORS ON YELLOWTAIL LYMPHOCYTES.] *Nippon Suisan Gakkaishi* 57(12):2219-2222. 1991. In Japanese with English summ. FR 37(2)

[Fish Dis. Lab., Fac. Agric., Kochi Univ., Nankoku, Kochi 783, Japan] *Seriola quinqueradiata.*

92-002745 Oliveira, C.; L. F. Almeida-Toledo; L. Mori and S. A. Toledo-Filho. EXTENSIVE CHROMOSOMAL REARRANGEMENTS AND NUCLEAR DNA CONTENT CHANGES IN THE EVOLUTION OF THE ARMOURED CATFISHES GENUS *CORYDORAS* (PISCES, SILURIFORMES, CALLICHTHYIDAE). *J. Fish Biol.* 40(3):419-431. 1992. FR 37(2)

[Dep. Morfol., Inst. Biocienc., Univ. Estadual Paulista, Julio de Mesquita Filho, Campus Botucatu, 18610, Botucatu, SP, Brazil] Data for 11 species in South America.

92-002746 Osinov, A. G. [GENETIC DIVERGENCE AND PHYLOGENETICAL RELATIONSHIPS BETWEEN LENOKS OF GENUS *BRACHYMYSTAX* AND HUCHENS OF GENERA *HUCHO* AND *PARAHUCHO.*] *Genetika* 27(12):2127-2136. 1991. In Russian with English summ. FR 37(2)

[M.V. Lomonosov Moscow State Univ., Dep. Biol., Moscow, USSR] *H. taimen* and *H. perryi* in the USSR.

92-002747 Padhi, B. K. and A. R. Khuda-Bukhsh. LACTATE DEHYDROGENASE ISOZYME PATTERNS IN DEVELOPING STAGES OF FOUR SPECIES OF INDIAN CARPS (CYPRINIDAE, PISCES). *Natl. Acad. Sci. Lett.* 12(2):59-61. 1989. From Anim. Breeding Abstr. 59(11)8006. 1991. FR 37(2)

[Dep. Zool., Univ. Kalyani, Kalyani-741 235, India] *Catla catla, Cirrhinus mrigala, Labeo rohita* and *L. bata.*

92-002748 Penman, D. J.; A. Iyengar; A. J. Beeching; A. Rahman; Z. Sulaiman; N. Bromage and N. Maclean. INHERITANCE OF THE MTrGH GENE IN TRANSGENIC RAINBOW TROUT. *Aquaculture* 100(1-3):102. 1992. Abstract only. FR 37(2)

[Inst. Aquacult., Univ. Stirling, Stirling, Scotland] *Oncorhynchus mykiss.*

92-002749 Pohar, Jurij. ESTIMATION OF HERITABILITIES AND GENETIC CORRELATIONS FOR CONSECUTIVE BODY WEIGHTS OF RAINBOW TROUT REARED IN FRESH AND SEA WATER. *Aquaculture* 100(1-3):103. 1992. Abstract only. FR 37(2)

[Biotech. Fac. Ljubljana, Zootech. Dep., Domzale, Yugoslavia] *Oncorhynchus mykiss.*

92-002750 Quattro, Joseph M.; John C. Avise and Robert C. Vrijenhoek. AN ANCIENT CLONAL LINEAGE IN THE FISH GENUS *POECILIOPSIS* (ATHERINIFORMES: POECILIIDAE). *Proc. Natl. Acad. Sci. U.S.A.* 89(1):348-352. 1992. FR 37(2)

[Hopkins Mar. Stn., Stanford Univ., Pacific Grove, CA 93950] *P. monacha* and *P. occidentalis* in Mexico.

92-002751 Raesly, Richard Lewis. GENETIC AND MORPHOLOGICAL CONSEQUENCES OF A FOUNDER EVENT IN AN INTRODUCED POPULATION OF THE BANDED DARTER, *ETHEOSTOMA ZONALE* (COPE) (TELEOSTEI: PERCIDAE). *Ph.D. dissertation, Pa. State Univ.* 168p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4001. 1992. Order No. DA9204273. FR 37(2)

92-002752 Rasero, R.; E. Cauvin and G. Forneris. [ELECTROPHORETIC CHARACTERIZATION OF THE EARLY STAGES OF ONTOGENESIS IN *SALMO TRUTTA MARMORATUS.*] *Atti Conv. Naz. Assoc. Ital. Ittiol. Acque Dolci Torino* No. 2. p. 261-267. 1987. In Italian. From Ann. Fac. Med. Vet. Torino No. 32. p. 189. 1987. FR 37(2)

92-002753 Rico, Ciro; Urs Kuhnlein and Gerard J. FitzGerald. A DNA PROBE THAT YIELDS HIGHLY INFORMATIVE DNA FINGERPRINTS FOR THE THREESPINE STICKLEBACK. *Trans. Am. Fish. Soc.* 120(6):809-815. 1991. FR 37(2)

[Dep. Anim. Sci., Macdonald Coll. McGill Univ., Sainte Anne Bellevue, PQ, Canada H9X 1CO] *Gasterosteus aculeatus.*

92-002754 Roby, D.; J. D. Lambert and J. M. Sevigny. MORPHOMETRIC AND ELECTROPHORETIC APPROACHES TO DISCRIMINATION OF CAPELIN (*MALLOTUS VILLOSUS*) POPULATIONS IN THE ESTUARY AND GULF OF ST. LAWRENCE. *Can. J. Fish. Aquat. Sci.* 48(11):2040-2050. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, Maurice Lamontagne Inst., P.O. Box 1000, Mont-Joli, PQ, Canada G5H 3Z4]

92-002755 Seyoum, Seifu and Irv Kornfield. IDENTIFICATION OF THE SUBSPECIES OF *OREOCHROMIS NILOTICUS* (PISCES: CICHLIDAE) USING RESTRICTION ENDONUCLEASE ANALYSIS OF MITOCHONDRIAL DNA. *Aquaculture* 102(1/2):29-42. 1992. FR 37(2)

[Kornfield: Dep. Zool., Univ. Maine, Orono 04469]

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002756 Sibour, M.; T. Civera; E. Parisi and M. Vacchi. [ELECTROFORETIC INVESTIGATION ON SOME ANTARCTIC FISH.] *Atti Soc. Ital. Sci. Vet. Pisa* Vol. 42. 1989. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 465. 1988-1990. FR 37(2)

92-002757 Strahle, U. and P. W. Ingham. FLIGHT OF FANCY OR A MAJOR NEW SCHOOL? *Curr. Biol.* 2(3):135-138. 1992. FR 37(2)

[ICRF Dev. Biol. Unit, Dep. Zool., Oxford OX1 3PS, England] *Brachydanio rerio.*

92-002758 Strauss, Richard E. CORRELATIONS BETWEEN HETEROZYGOSITY AND PHENOTYPIC VARIABILITY IN *COTTUS* (TELEOSTEI: COTTIDAE): CHARACTER COMPONENTS. *Evolution* 45(8):1950-1956. 1991. FR 37(2)

[Dep. Ecol. & Evol. Biol., Univ. Ariz., Tucson 85721]

92-002759 Teugels, G. G.; C. Ozouf-Costaz; M. Legendre and M. Parrent. A KARYOLOGICAL ANALYSIS OF THE ARTIFICIAL HYBRIDIZATION BETWEEN *CLARIAS GARIEPINUS* (BURCHELL, 1822) AND *HETEROBRANCHUS LONGIFILIS* VALENCIENNES, 1840 (PISCES; CLARIIDAE). *J. Fish Biol.* 40(1):81-86. 1992. FR 37(2)

[Lab. Ichtyol., Mus. Royal Afrique Cent., B-3080 Tervuren, Belgium]

92-002760 Teugels, G. G.; R. Guyomard and M. Legendre. ENZYMATIC VARIATION IN AFRICAN CLARIID CATFISHES. *J. Fish Biol.* 40(1):87-96. 1992. FR 37(2)

[Lab. Ichtyol., Mus. Royal Afrique Cent., B-3080 Tervuren, Belgium] *Clarias anguillaris, C. ebriensis, C. gariepinus,* and *Heterobranchus longifilis.*

92-002761 Thorgaard, Gary H. APPLICATION OF GENETIC TECHNOLOGIES TO RAINBOW TROUT. *Aquaculture* 100(1-3):85-97. 1992. FR 37(2)

[Dep. Zool. & Program Genet. & Cell Biol., Wash. State Univ., Pullman 99164-4236] *Oncorhynchus mykiss.*

92-002762 van der Bank, Federick H.; Martha K. J. Swart and Johannes T. Ferreira. BIOCHEMICAL GENETIC EVALUATION OF NINE RAINBOW TROUT POPULATIONS IN SOUTH AFRICA. *Aquaculture* 100(1-3):104. 1992. Abstract only. FR 37(2)

[Dep. Zool., Rand Afrikaans Univ., Box 524, Johannesburg 2000 South Africa] *Oncorhynchus mykiss.*

92-002763 Vasil'yev, V. P.; A. G. Osinov and E. D. Vasil'yeva. RETICULATE SPECIES FORMATION IN VERTEBRATES: THE DIPLOID-TRIPLOID-TETRAPLOID COMPLEX IN THE GENUS *COBITIS* (COBITIDAE). V. ORIGIN OF EVEN-POLYPLOID SPECIES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):22-36. 1991. FR 37(2)

[Inst. Evol. Morphol. Anim. (IEMEZh), Acad. Sci. USSR, Moscow, USSR]

92-002764 Veloso, Alberto; Patricia Iturra; Nelson Diaz; Nelson Colihueque and Francisco Javier Estay. CHROMOSOME POLYMORPHISM IN RAINBOW TROUT POPULATIONS FROM CENTRAL CHILE. *Aquaculture* 100(1-3):104-105. 1992. Abstract only. FR 37(2)

[Dep. Cienc. Ecol., Fac. Cienc., Univ. Chile, Santiago, Chile] *Oncorhynchus mykiss.*

92-002765 Wagner, G. P. and B. Y. Misof. EVOLUTIONARY MODIFICATION OF REGENERATIVE CAPABILITY IN VERTEBRATES: A COMPARATIVE STUDY ON TELEOST PECTORAL FIN REGENERATION. *J. Exp. Zool.* 261(1):62-78. 1992. FR 37(2)

[Inst. Zool., Univ. Vienna, A-1090 Vienna, Austria]

92-002766 Waples, Robin S. GENETIC INTERACTIONS BETWEEN HATCHERY AND WILD SALMONIDS: LESSONS FROM THE PACIFIC NORTHWEST. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):124-133. 1991. In English with French summ. FR 37(2)

[NMFS/NOAA, Northwest Fish. Cent., 2725 Montlake Blvd. E., Seattle, WA 98112] *Oncorhynchus.*

92-002767 Wimberger, Peter Hans. CAUSES OF MORPHOLOGICAL PLASTICITY IN CICHLID FISHES. *Ph.D. dissertation, Cornell Univ.* 190p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4003. 1992. Order No. DA9203946. FR 37(2)

Geophagus.

92-002768 Ye, Y. Z.; Q. J. Wu and R. D. Chen. [STUDIES ON CYTOLOGY OF CROSSES BETWEEN GRASS CARP AND CARP - ASYNCHRONIZATION BETWEEN NUCLEUS AND CYTOPLASM IN DISTANT HYBRIDIZATION OF FISHES.] *Acta Hydrobiol. Sin.* 13(3):234-239. 1989. In Chinese with English summ. From Anim. Breed. Abstr. 60(1):668. 1992. FR 37(2)

[Inst. Hydrobiol., Acad. Sinica, Wuhan, China] *Ctenopharyngodon idella* x *Cyprinus carpio.*

92-002769 Yoshizaki, Goro; Takashi Oshiro; Fumio Takashima; Ikuo Hirono and Takashi Aoki. GERM LINE TRANSMISSION OF CARP α-GLOBIN GENE INTRODUCED IN RAINBOW TROUT. *Nippon Suisan Gakkaishi* 57(12):2203-2209. 1991. In English with Japanese summ. FR 37(2)

[Lab. Fish Culture, Tokyo Univ. Fish., Konan, Minato, Tokyo 108, Japan] *Oncorhynchus mykiss.*

GENETICS, VARIATION STUDIES AND HYBRIDIZATION (Continued)

92-002770 Zehren, S. J. PHYLOGENETIC RELATIONSHIPS OF THE BOARFISHES (TELEOSTEI: FAMILY CAPROIDAE). *Am. Zool.* 31(5):61A. 1991. Abstract only. FR 37(2)
[Univ. Ala., Birmingham] *Capros, Antigonia,* and *Microcapros.*

92-002771 Zhu, L. F. [GENETIC MONITORING OF DIFFERENT GYNOGENETIC CLONES OF CRUCIAN CARP (*CARASSIUS AURATUS GIBELIO*) BY TISSUE TRANSPLANTATION.] *Acta Hydrobiol. Sin.* 14(1):16-21. 1990. In Chinese with English summ. From Anim. Breed. Abstr. 60(1):669. 1992. FR 37(2)
[Inst. Hydrobiol., Acad. Sinica, Wuhan, China]

BEHAVIOR

92-002772 Abate, M. E. HERBIVORES INTERFERE WITH FORAGING BY A CARNIVOROUS, CORAL REEF FISH. *Am. Zool.* 31(5):104A. 1991. Abstract only. FR 37(2)
[Northeast. Univ., Mar. Sci. Cent., Nahant, MA] *Thalassoma bifasciatum* and *T. planifrons.*

92-002773 Adams, James Joseph, Jr. A LABORATORY STUDY INVESTIGATING TEMPERATURE PREFERENCE AND HABITAT SELECTION OF THE CONVICT CICHLID *CICHLASOMA NIGROFASCIATUM* (PISCES: CICHLIDAE). *M.S. thesis, Calif. State Polytech. Univ.* 1991. FR 37(2)

92-002774 Almada, Vitor C.; Rui F. De Oliveira; Eduardo N. Barata; Emanuel J. Goncalves and Ana P. Rito. FIELD OBSERVATIONS ON THE BEHAVIOUR OF THE BREEDING MALES OF *LIPOPHRYS PHOLIS* (PISCES: BLENNIIDAE). *Port. Zool.* 1(4):27-36. 1990. In English with Portuguese summ. FR 37(2)
[Grupo Estudos Eco-Etol., Inst. Superior Psicol. Apl., R. Jardim do Tabaco 44, P-1100 Lisbon, Portugal]

92-002775 Almada, Vitor C.; Emanuel J. Goncalves; Rui F. De Oliveira and Eduardo N. Barata. SOME FEATURES OF THE TERRITORIES IN THE BREEDING MALES OF THE INTERTIDAL BLENNY *LIPOPHRYS PHOLIS* (PISCES: BLENNIIDAE). *J. Mar. Biol. Assoc. U.K.* 72(1):187-197. 1992. FR 37(2)
[Grupo Estudos Eco-Etol., Inst. Superior Psicol. Apl., Rua Jardim do Tabaco, 44, 1100 Lisbon, Portugal]

92-002776 Auster, P. J.; R. J. Malatesta and S. C. LaRosa. MICROHABITAT USE BY CONTINENTAL SLOPE MEGAFAUNA. *Am. Zool.* 31(5):127A. 1991. Abstract only. FR 37(2)
[NOAA's Natl. Undersea Res. Cent., Univ. Conn., Groton] *Glyptocephalus cynoglossus, Synaphobranchus kaupi, Urophycis chesteri, Nezumia bairdi,* and *Coryphaenoides rupestris.*

92-002777 Bagliniere, Jean-Luc; Gerard Maisse and Alix Nihouarn. RADIO-TRACKING OF MALE ADULT ATLANTIC SALMON, *SALMO SALAR* L., DURING THE LAST PHASE OF SPAWNING MIGRATION IN A SPAWNING STREAM (BRITTANY, FRANCE). *Aquat. Living Resour.* 4(3):161-167. 1991. In English with French summ. FR 37(2)
[INRA, Stn. Physiol. Ecol. Poissons, 65 Saint-Brieuc, 35042 Rennes Cedex, France]

92-002778 Bardonnet, Agnes; Philippe Gaudin and Henri Persat. MICROHABITATS AND DIEL DOWNSTREAM MIGRATION OF YOUNG GRAYLING (*THYMALLUS THYMALLUS* L.). *Freshwater Biol.* 26(3):365-376. 1991. FR 37(2)
[Lab. Anim. Biol. & Ecol., Claude Bernard Univ., Lyon I, 43 Blvd. du 11 Novembre 1918, F-69622 Villeurbanne Cedex, France]

92-002779 Biro, Peter. FOOD RESOURCE PARTITIONING BETWEEN BREAM *(ABRAMIS BRAMA)* AND RAZOR FISH *(PELECUS CULTRATUS)* IN LAKE BALATON (HUNGARY). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2513-2516. 1989. FR 37(2)
[Balaton Limnol. Res. Inst. Hungarian Acad. Sci., H-8237 Tihany, Hungary]

92-002780 Booman, Clelia; Arild Folkvord and John R. Hunter. RESPONSIVENESS OF STARVED NORTHERN ANCHOVY *ENGRAULIS MORDAX* LARVAE TO PREDATORY ATTACKS BY ADULT ANCHOVY. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):707-711. 1991. FR 37(2)
[Zool. Lab., Univ. Bergen, Allegate 45, N-5007 Bergen, Norway]

92-002781 Booth, David J. LARVAL SETTLEMENT PATTERNS AND PREFERENCES BY DOMINO DAMSELFISH *DASCYLLUS ALBISELLA* GILL. *J. Exp. Mar. Biol. Ecol.* 155(1):85-104. 1992. FR 37(2)
[Div. Sci. & Math., Univ. Virgin Islands, St. Thomas 00802]

92-002782 Brewer, D. T. and K. Warburton. SELECTION OF PREY FROM A SEAGRASS/MANGROVE ENVIRONMENT BY GOLDEN LINED WHITING, *SILLAGO ANALIS* (WHITLEY). *J. Fish Biol.* 40(2):257-271. 1992. FR 37(2)
[CSIRO Mar. Lab., P.O. Box 120, Cleveland, 4163 Qld., Australia]

92-002783 Burke, John Selden. INFLUENCE OF ABIOTIC FACTORS AND FEEDING ON HABITAT SELECTION OF SUMMER AND SOUTHERN FLOUNDER DURING COLONIZATION OF NURSERY GROUNDS. *Ph.D. dissertation, N.C. State Univ.* 108p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4070. 1992. Order No. DA9203167. FR 37(2)
Paralichthys lethostigma and *P. dentatus.*

BEHAVIOR (Continued)

92-002784 Consoli, Rotraut A. G. B.; Carlos T. Guimaraes; Jacqueline A. Do Carmo; Delza M. Soares and Jose S. Dos Santos. *ASTRONOTUS OCELLATUS* (CICHLIDAE:PISCES) AND *MACROPODUS OPERCULARIS* (ANABATIDAE:PISCES) AS PREDATORS OF IMMATURE *AEDES FLUVIATILIS* (DIPTERA:CULICIDAE) AND *BIOMPHALARIA GLABRATA* (MOLLUSCA:PLANORBIDAE). *Mem. Inst. Oswaldo Cruz Rio J.* 86(4):419-424. 1991. FR 37(2)
[Cent. Pesq. Rene Rachou - FIOCRUZ, C.P. 1743, 30190 Belo Horizonte, MG, Brazil]

92-002785 Copp, Gordon H. COMPARATIVE MICROHABITAT USE OF CYPRINID LARVAE AND JUVENILES IN A LOTIC FLOODPLAIN CHANNEL. *Environ. Biol. Fishes* 33(1-2):181-193. 1992. FR 37(2)
[Hatfield Polytechnic, Div. Environ. & Biosci., College Ln., Hatfield, Herts AL10 9AB, England] *Leuciscus cephalus, Alburnus alburnus, Rutilus rutilus, Leuciscus leuciscus, Chondrostoma* and *Gobio gobio* in France.

92-002786 Cuthill, Innes. FIELD EXPERIMENTS IN ANIMAL BEHAVIOUR: METHODS AND ETHICS. *Anim. Behav.* 42(6):1007-1014. 1991. FR 37(2)
[Dep. Zool., Univ. Bristol, Bristol BS8 1UG, England]

92-002787 Drucker, E. G. MECHANICS AND FUNCTION OF ADHESION BY THE NORTHERN CLINGFISH DURING PREDATION ON LIMPETS. *Am. Zool.* 31(5):18A. 1991. Abstract only. FR 37(2)
[Harvard Univ., Cambridge, MA] *Gobiesox maeandricus.*

92-002788 Dunbrack, R. L. SUB-SURFACE DRIFT FEEDING BY COHO SALMON (*ONCORHYNCHUS KISUTCH*, WALBAUM): A MODEL AND TEST. *J. Fish Biol.* 40(3):455-464. 1992. FR 37(2)
[Biol. Dep., Memorial Univ., St. John's, NF, Canada A1B 3X9]

92-002789 Edmonds, Les. ANGEL SHARKS AND THEIR CARE IN CAPTIVITY. *Trop. Fish Hobbyist* 40(5):52-56. 1992. FR 37(2)
Squatina californica and *S. japonica.*

92-002790 FitzGerald, Gerard J. THE ROLE OF CANNIBALISM IN THE REPRODUCTIVE ECOLOGY OF THE THREESPINE STICKLEBACK. *Ethology* 89(3):177-194. 1991. FR 37(2)
[Dep. Biol., Univ. Laval, Ste. Foy, PQ, Canada G1K 7P4] *Gasterosteus aculeatus.*

92-002791 FitzGerald, Gerard J. FILIAL CANNIBALISM IN FISHES: WHY DO PARENTS EAT THEIR OFFSPRING? *Trends Ecol. Evol.* 7(1):7-10. 1992. FR 37(2)
[Dep. Biol., Univ. Laval, Ste. Foy, PQ, Canada G1K 7P4]

92-002792 Fraser, Douglas F. and Felicity A. Huntingford. FEEDING AND AVOIDING PREDATION HAZARD: THE BEHAVIORAL RESPONSE OF THE PREY. *Ethology* 73(1):56-68. 1986. FR 37(2)
[Dep. Biol., Siena Coll., Loudonville, NY 12211] *Salmo trutta* and *Gasterosteus aculeatus.*

92-002793 Frith, H. R. and R. W. Blake. MECHANICS OF THE STARTLE RESPONSE IN THE NORTHERN PIKE, *ESOX LUCIUS*. *Can. J. Zool.* 69(11):2831-2839. 1991. In English with French summ. FR 37(2)
[Axys Environ. Consult., Ltd., 2045 Mills Rd., Sidney, BC, Canada V8L 3S8]

92-002794 Furukawa, Kiyoshi; Katsumi Aida; Motoi Yoshioka; Hideo Satoh and Isao Hanyu. [EFFECTS OF PHOTOPERIOD AND WATER TEMPERARURE ON THE SPAWNING RHYTHM OF SHIROGISU *SILLAGO JAPONICA*.] *Nippon Suisan Gakkaishi* 57(12):2193-2201. 1991. In Japanese with English summ. FR 37(2)
[Lab. Fish Physiol., Dep. Fish., Fac. Agric., Univ. Tokyo, Tokyo 113, Japan]

92-002795 Gibb, A. C.; B. C. Jayne and G. V. Lauder. PECTORAL FIN LOCOMOTION IN THE BLUEGILL SUNFISH. *Am. Zool.* 31(5):97A. 1991. Abstract only. FR 37(2)
[Univ. Calif., Irvine] *Lepomis macrochirus.*

92-002796 Gochfeld, Deborah J. CORALS BENEFIT FROM TERRITORIAL DEFENSE BY THE HERBIVOROUS DAMSELFISH *STEGASTES NIGRICANS* IN MOOREA, FRENCH POLYNESIA. *Pac. Sci.* 46(1):93. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-002797 Godwin, John R. BEHAVIORAL CHANGES ASSOCIATED WITH PROTANDROUS SEX REVERSAL IN THE ANEMONEFISH *AMPHIPRION MELANOPUS*. *Pac. Sci.* 46(1):93-94. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-002798 Griffith, Jack. WINTER AND TROUT IN STREAMS OF THE ROCKY MOUNTAINS, USA. *Freshwater Catch* No. 46. p. 9-11. 1991. FR 37(2)
Oncorhynchus mykiss in Idaho.

92-002799 Halpin, P. M. and G. Goslow. INTER- AND INTRAMARSH VARIATION OF HABITAT USAGE IN INTERTIDAL FISH WITH EMPHASIS ON THE MUMMICHOG, *FUNDULUS HETEROCLITUS*. *Am. Zool.* 31(5):136A. 1991. Abstract only. FR 37(2)
[Sect. Popul. Biol., Morphol. & Genet., Brown Univ., Providence, RI]

BEHAVIOR (Continued)

92-002800 Heine, C. THE FORCES GENERATED BY A FLAPPING RAY. *Am. Zool.* 31(5):96A. 1991. Abstract only. FR 37(2)
[Duke Univ., Durham, NC]

92-002801 Hinch, Scott G. and Nicholas C. Collins. IMPORTANCE OF DIURNAL AND NOCTURNAL NEST DEFENSE IN THE ENERGY BUDGET OF MALE SMALLMOUTH BASS: INSIGHTS FROM DIRECT VIDEO OBSERVATIONS. *Trans. Am. Fish. Soc.* 120(5):657-663. 1991. FR 37(2)
[Dep. Zool. & Erindale Coll., Univ. Toronto, Mississauga, ON, Canada L5L 1C6] *Micropterus dolomieu.*

92-002802 Holbrook, Sally J. and Russell J. Schmitt. CAUSES AND CONSEQUENCES OF DIETARY SPECIALIZATION IN SURFPERCHES: PATCH CHOICE AND INTRASPECIFIC COMPETITION. *Ecology* 73(2):402-412. 1992. FR 37(2)
[Dep. Biol. Sci. & Coastal Res. Cent., Mar. Sci. Inst., Univ. Calif., Santa Barbara 93106] *Embiotoca lateralis* in California.

92-002803 Howe, Jeffrey C. FIELD OBSERVATIONS OF DEATH FEIGNING IN THE CONVICT TANG, *ACANTHURUS TRIOSTEGUS* (LINNAEUS), WITH COMMENTS ON THE NOCTURNAL COLOR PATTERN IN JUVENILE SPECIMENS. *J. Aquaricult. Aquat. Sci.*6(1):13-15. 1991. FR 37(2)
[Div. Fish., Natl. Mus. Nat. Hist., Smithsonian Inst., Washington, DC 20560]

92-002804 Hugie, Don M.; Pamela L. Thuringer and R. Jan F. Smith. THE RESPONSE OF THE TIDEPOOL SCULPIN, *OLIGOCOTTUS MACULOSUS*, TO CHEMICAL STIMULI FROM INJURED CONSPECIFICS, ALARM SIGNALLING IN THE COTTIDAE (PISCES). *Ethology* 89(4):322-334. 1991. FR 37(2)
[Smith: Biol. Dep., Univ. Saskatechwan, Saskatoon, SN, Canada S7N 0W0]

92-002805 Huntingford, Felicity and Nick Giles. INDIVIDUAL VARIATION IN ANTI-PREDATOR RESPONSES IN THE THREE-SPINED STICKLEBACK (*GASTEROSTEUS ACULEATUS* L.). *Ethology* 74(3):205-210. 1987. FR 37(2)
[Dep. Zool., The Univ., Glasgow G12 9QQ, Scotland] *Esox lucius.*

92-002806 Inada, Yoshikazu and Nobuhiko Taniguchi. [SPAWNING BEHAVIOR AND AFTER-SPAWNING SURVIVAL IN INDUCED TRIPLOID AYU *PLECOGLOSSUS ALTIVELIS.*] *Nippon Suisan Gakkaishi* 57(12):2265-2269. 1991. In Japanese with English summ. FR 37(2)
[Fukuoka Prefectural Fresh Water Fish. Exp. Stn., Asakura, Fukuoka 838-13, Japan]

92-002807 Itzkowitz, M. SEXUAL DIFFERENCES IN OFFSPRING DEFENSE IN A MONOGAMOUS CICHLID FISH. *Z. Tierpsychol.* 70(3):247-255. 1985. FR 37(2)
[Biol. Dep., Lehigh Univ., Bethlehem, PA 18015] *Cichlasoma cyanoguttatum.*

92-002808 Jayne, B. C. and G. V. Lauder. KINEMATICS AND MUSCLE ACTIVITY OF SWIMMING IN THE LARGE MOUTH BASS. *Am. Zool.* 31(5):95A. 1991. Abstract only. FR 37(2)
[Univ. Cincinnati, Cincinnati, OH] *Micropterus salmoides.*

92-002809 Jorgensen, E. H. and M. Jobling. FEEDING BEHAVIOUR AND EFFECT OF FEEDING REGIME ON GROWTH OF ATLANTIC SALMON, *SALMO SALAR. Aquaculture* 101(1/2):135-146. 1992. FR 37(2)
[Norwegian Coll. Fish. Sci., Univ. Tromso, Dramsveien 201, N-9000 Tromso, Norway]

92-002810 Kaiser, M. J. THE ONTOGENY OF PREDATORY MECHANISMS IN THE FIFTEEN-SPINED STICKLEBACK, *SPINACHIA SPINACHIA* (L.). *J. Fish Biol.* 40(3):485-487. 1992. FR 37(2)
[MAFF Fish. Lab., Benarth Rd., Conwy, Gwynedd LL32 8UB, Wales]

92-002811 Kasumyan, A. O. and V. Yu. Ponomarev. CHEMICAL SIGNALS FOR NATURAL FEEDING OF FISH. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):77-86. 1991. FR 37(2)
[Biol. Dep., Moscow State Univ., Moscow, USSR] *Cyprinus carpio.*

92-002812 Kaufmann, Ruediger and Wolfgang Wieser. INFLUENCE OF TEMPERATURE AND AMBIENT OXYGEN ON THE SWIMMING ENERGETICS OF CYPRINID LARVAE AND JUVENILES. *Environ. Biol. Fishes* 33(1-2):87-95. 1992. FR 37(2)
[Univ. Innsbruck, Dep. Zool., Technikerstr. 25, A-6020 Innsbruck, Austria] *Chalcalburnus chalcoides.*

92-002813 Kesler, David H. and Wayne R. Munns, Jr. DIEL FEEDING BY ADULT RED-SPOTTED NEWTS IN THE PRESENCE AND ABSENCE OF SUNFISH. *J. Freshwater Ecol.* 6(3):267-273. 1991. FR 37(2)
[Biol. Dep., Rhodes Coll., 2000 N. Parkway, Memphis, TN 38112] *Lepomis gibbosus* and *L. macrochirus* in Rhode Island.

92-002814 Kosaki, Randall. SOCIAL INTERACTIONS AND FORAGING ECOLOGY OF THE ORNATE BUTTERFLYFISH, *CHAETODON ORNATISSIMUS. Pac. Sci.* 46(1):96. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

BEHAVIOR (Continued)

92-002815 Lammens, Eddy H. R. R.; Aafje Frank-Landman; Peter J. McGillavry and Bauke Vlink. THE ROLE OF PREDATION AND COMPETITION IN DETERMINING THE DISTRIBUTION OF COMMON BREAM, ROACH AND WHITE BREAM IN DUTCH EUTROPHIC LAKES. *Environ. Biol. Fishes* 33(1-2):195-205. 1992. FR 37(2)
[Limnol. Inst., Tjeukemeer Lab., DeAkkers 47, 8536 VD, Oosterzee, Netherlands] *Stizostedion lucioperca, Blicca bjoerkna, Rutilus rutilus* and *Abramis brama.*

92-002816 Libosvarsky, Jiri; Vlastimil Barus and Oldrich Sterba. FACULTATIVE PARASITISM OF *PSEUDORASBORA PARVA* (PISCES). *Folia Zool.* 39(4):355-360. 1990. FR 37(2)
[Inst. Syst. & Ecol. Biol., Czechoslavak Acad. Sci., Kvetna 8, 603 65 Brno, Czechoslovakia]

92-002817 Lindstrom, Kai. THE EFFECT OF RESOURCE HOLDING POTENTIAL, NEST SIZE AND INFORMATION ABOUT RESOURCE QUALITY ON THE OUTCOME OF INTRUDER-OWNER CONFLICTS IN THE SAND GOBY. *Behav. Ecol. Sociobiol.* 30(1):53-58. 1992. FR 37(2)
[Integrative Ecol. Unit, Dep. Zool., Univ. Helsinki, P. Rautatiekatu 13, SF-00100 Helsinki, Finland] *Pomatoschistus minutus.*

92-002818 Lutnesky, M. M. F. and J. P. Szyyper. THE INFLUENCE OF SPATIAL FOOD DISTRIBUTION ON AGONISTIC BEHAVIOR IN JUVENILE MAHIMAHI, *CORYPHAENA HIPPURUS. J. Appl. Ichthyol.* 7(4):253-256. 1991. In English with German and French Summ. FR 37(2)
[Inst. Mar. Biol., P.O. Box 1346, Kaneohe, HI 96744]

92-002819 Lyczkowski-Shultz, Joanne and John P. Steen, Jr. DIEL VERTICAL DISTRIBUTION OF RED DRUM *SCIAENOPS OCELLATUS* LARVAE IN THE NORTHCENTRAL GULF OF MEXICO. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):631-641. 1991. FR 37(2)
[Gulf Coast Res. Lab., P.O. Box 7000, Ocean Springs, MS 39564]

92-002820 Mahon, Jeffrey. ADVANTAGE OF JUVENILE COLORATION IN *LABROIDES PHTHIROPHAGUS. Pac. Sci.* 46(1):98. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-002821 Mayr, M. and A. Berger. TERRITORIALITY AND MICROHABITAT SELECTION IN TWO INTERTIDAL NEW ZEALAND FISH. *J. Fish Biol.* 40(2):243-256. 1992. FR 37(2)
[Inst. Zool., Univ. Wien, Althanstr. 14, A-1090 Vienna, Austria] *Forsterygion nigripenne robustum* and *Acanthoclinus fuscus.*

92-002822 McDowall, R. M. DIADROMY: ORIGINS AND DEFINITIONS OF TERMINOLOGY. *Copeia* 1992(1):248-251. 1992. FR 37(2)
[Freshwater Fish. Cent., MAF, P.O. Box 8324, Christchurch, New Zealand]

92-002823 McElroy, Douglas M.; Irv Kornfield and Jon Everett. COLORATION IN AFRICAN CICHLIDS: DIVERSITY AND CONSTRAINTS IN LAKE MALAWI ENDEMICS. *Neth. J. Zool.* 41(4):250-268. 1991. FR 37(2)
[Dep. Zool. & Migratory Fish Res. Inst., Univ. Maine, Orono 04469] Data for 30 species.

92-002824 McLennan, Deborah A. INTEGRATING PHYLOGENY AND EXPERIMENTAL ETHOLOGY: FROM PATTERN TO PROCESS. *Evolution* 45(8):1773-1789. 1991. FR 37(2)
[Dep. Zool., Univ. Toronto, Toronto, ON, Canada M5S 1A1] *Gasterosteus aculeatus.*

92-002825 Mensinger, A. F. THE EFFECT OF LUMINESCENCE ON PREDATOR/PREY INTERACTIONS. *Am. Zool.* 31(5):99A. 1991. Abstract only. FR 37(2)
[Univ. Calif., Santa Barbara] *Porichthys notatus.*

92-002826 Mesa, Matthew G. VARIATION IN FEEDING, AGGRESSION, AND POSITION CHOICE BETWEEN HATCHERY AND WILD CUTTHROAT TROUT IN AN ARTIFICIAL STREAM. *Trans. Am. Fish. Soc.* 120(6):723-727. 1991. FR 37(2)
[U.S. Fish. & Wildl. Serv., Natl. Fish. Res. Cent. - Seattle, Columbia River Field Stn., Cook, WA 98605] *Oncorhynchus clarki clarki.*

92-002827 Morgan, M. Joanne and Jean-Guy J. Godin. ANTIPREDATOR BENEFITS OF SCHOOLING BEHAVIOUR IN A CYPRINODONTID FISH, THE BANDED KILLIFISH (*FUNDULUS DIAPHANUS*). *Z. Tierpsychol.* 70(3):236-246. 1985. FR 37(2)
[Dep. Biol., Mt. Allison Univ., Sackville, NB, Canada E0A 3C0]

92-002828 Mourad, Mohamed Hassan. INFLUENCE OF BODY SIZE ON SWIMMING PERFORMANCE OF CARP (*CYPRINUS CARPIO*). *Acta Ichthyol. Piscatoria* 21(1):87-91. 1991. In English with Polish summ. FR 37(2)
[Inst. Oceanogr. & Fish., Alexandria, Egypt]

92-002829 Mrowka, Wolfgang. ORAL FERTILIZATION IN A MOUTHBROODING CICHLID FISH. *Ethology* 74(4):293-296. 1987. FR 37(2)
[Zool. Inst., Pockelsstr. 10a, D-3300 Braunschweig, Germany] *Pseudocrenilabrus multicolor.*

BEHAVIOR (Continued)

92-002830 Mullen, Dennis Michael. SIZE-RELATED HABITAT USE IN A RIFFLE DWELLING FISH: THE LONGNOSE DACE (*RHINICHTHYS CATARACTAE*). *Ph.D. dissertation, Mich. State Univ.* 148p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(6):2872. 1991. Oder No. DA9134154. FR 37(2)

92-002831 Murdoch, Scott P.; F. William H. Beamish and Margaret F. Docker. LABORATORY STUDY OF GROWTH AND INTERSPECIFIC COMPETITION IN LARVAL LAMPREYS. *Trans. Am. Fish. Soc.* 120(5):653-656. 1991. FR 37(2)

[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Petromyzon marinus* and *Lampetra aepyptera.*

92-002832 Nechayev, I. V. and S. P. Musatov. EFFECT OF CATECHOLAMINES ON THE BEHAVIOR OF FISHES WITH DIFFERENT SOCIAL STRUCTURES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):63-76. 1991. FR 37(2)

[Inst. Evol. Morphol. & Ecol. Anim., USSR Acad. Sci., Moscow, USSR] *Hemichromis bimaculatus, Hemigrammus caudovittatus, Oncorhynchus mykiss,* and *Colossoma macropomum.*

92-002833 O'Brien, W. John and Barbara I. Evans. SALTATORY SEARCH BEHAVIOR IN FIVE SPECIES OF PLANKTIVOROUS FISH. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2371-2376. 1989. FR 37(2)

[Dep. Syst. & Ecol., Univ. Kans., Lawrence 66045] *Lepomis macrochirus, Notemigonus crysoleucas, Coregonus artedii, Pomoxis annularis,* and *Thymallus arcticus.*

92-002834 Osenberg, Craig W.; Gary G. Mittelbach and Peter C. Wainwright. TWO-STAGE LIFE HISTORIES IN FISH: THE INTERACTION BETWEEN JUVENILE COMPETITION AND ADULT PERFORMANCE. *Ecology* 73(1):255-267. 1992. FR 37(2)

[Mar. Sci. Inst. & Dep. Biol. Sci., Univ. Calif., Santa Barbara 93106] *Lepomis gibbosus* and *L. macrochirus* in Michigan.

92-002835 Parsons, Glenn R. NOTES ON THE BEHAVIOR OF THE BONNETHEAD SHARK, *SPHYRNA TIBURO* (LINNAEUS) DURING BIRTH. *J. Aquaricult. Aquat. Sci.* 6(1):6-8. 1991. FR 37(2)

[Dep. Biol., Univ. Miss., University 38677]

92-002836 Parsons, Glenn R. and Kristi A. Killam. ACTIVITY PATTERNS OF THE BONNETHEAD SHARK, *SPHYRNA TIBURO* (LINNAEUS). *J. Aquaricult. Aquat. Sci.* 6(1):8-13. 1991. FR 37(2)

[Dep. Biol., Univ. Miss., University 38677]

92-002837 Peterson, John D., Jr. ACTIVITY PATTERNS AND SPACE UTILIZATION OF SCALLOPED HAMMERHEAD PUPS, *SPHYRNA LEWINI,* IN KANEOHE BAY, HAWAII. *Pac. Sci.* 46(1):101-102. 1992. Abstract only. FR 37(2)

[Dep. Zool. & Inst. Mar. Biol., Univ. Hawaii Manoa, Honolulu 96822]

92-002838 Peterson, Mark S.; Ronald E. Brockmeyer, Jr., and Douglas M. Scheidt. HYPOXIA-INDUCED CHANGES IN VERTICAL POSITION AND ACTIVITY IN JUVENILE SNOOK, *CENTROPOMUS UNDECIMALIS*: ITS POTENTIAL ROLE IN SURVIVAL. *Fla. Sci.* 54(3/4):173-178. 1991. FR 37(2)

[Miss. State Univ., Dep. Biol. Sci., P.O. Drawer GY, Mississippi State 39762]

92-002839 Prophet, Carl W.; Thomas B. Brungardt and N. Kay Prophet. DIEL ACTIVITY AND SEASONAL MOVEMENTS OF STRIPED BASS X WHITE BASS HYBRIDS IN MARION RESERVOIR, KANSAS. *J. Freshwater Ecol.* 6(3):305-313. 1991. FR 37(2)

[Div. Biol. Sci., Emporia State Univ., Emporia, KS 66801] *Morone saxatilis* x *M. chrysops.*

92-002840 Rankin, C. H. and P. Moller. TEMPORAL PATTERNING OF ELECTRIC ORGAN DISCHARGES IN THE AFRICAN ELECTRIC CATFISH, *MALAPTERURUS ELECTRICUS* (GMELIN). *J. Fish Biol.* 40(1):49-58. 1992. FR 37(2)

[Dep. Psychol., Univ. British Columbia, Vancouver, BC, Canada V6T 1Y7]

92-002841 Ranta, Esa; Kai Lindstrom and Nina Peuhkuri. SIZE MATTERS WHEN THREE-SPINED STICKLEBACKS GO TO SCHOOL. *Anim. Behav.* 43(1):160-162. 1992. FR 37(2)

[Integrative Ecol. Unit, Dep. Zool., Univ. Helsinki, P. Rautatiekatu 13, SF-00100 Helsinki, Finland] *Gasterosteus aculeatus.*

92-002842 Reimchen, T. E. EVOLUTIONARY ATTRIBUTES OF HEADFIRST PREY MANIPULATION AND SWALLOWING IN PISCIVORES. *Can. J. Zool.* 69(11):2912-2916. 1991. In English with French summ. FR 37(2)

[Dep. Biol., Univ. Victoria, P.O. Box 1700, Victoria, BC, Canada V8W 2Y2] *Oncorhynchus clarki* and *Gasterosteus aculeatus.*

92-002843 Robichaud, David A.; Robert W. Elner and Richard F. J. Bailey. DIFFERENTIAL SELECTION OF CRAB *CHIONOECETES OPILIO* AND *HYAS* SPP. AS PREY BY SYMPATRIC COD *GADUS MORHUA* AND THORNY SKATE *RAJA RADIATA. U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):669-680. 1991. FR 37(2)

[Dep. Fish. & Oceans, Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

BEHAVIOR (Continued)

92-002844 Ross, William. NOTES ON FOSTERING EXPERIMENTS WITH CICHLIDS. *Trop. Fish Hobbyist* 40(5):114, 117-118, 120, 122. 1992. FR 37(2)
Tilapia.

92-002845 Ruzzante, Daniel E. and Roger W. Doyle. RAPID BEHAVIORAL CHANGES IN MEDAKA (*ORYZIAS LATIPES*) CAUSED BY SELECTION FOR COMPETITIVE AND NONCOMPETITIVE GROWTH. *Evolution* 45(8):1936-1946. 1991. FR 37(2)
[Biol. Dep., Dalhousie Univ., Halifax, NS, Canada B3H 4J1]

92-002846 Sarvala, Jouko; Sari Halsinaho; Harri Helminen; Arto Hirvonen; Matti Kiiskila; Matti Miinalainen and Vesa Saarikari. INTRASPECIFIC FOOD COMPETITION BETWEEN AGE GROUPS IN VENDACE, *COREGONUS ALBULA* (L). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2424. 1989. Abstract only. FR 37(2)
[Dep. Biol., Univ. Turku, SF-20500 Turku, Finland]

92-002847 Savino, Jacqueline F.; Elizabeth A. Marschall and Roy A. Stein. BLUEGILL GROWTH AS MODIFIED BY PLANT DENSITY: AN EXPLORATION OF UNDERLYING MECHANISMS. *Oecologia (Heidelb.)* 89(2):153-160. 1992. FR 37(2)
[Natl. Fish. Res. Cent. - Great Lakes, U.S. Fish & Wildl. Serv., 1451 Green Rd., Ann Arbor, MI 48105] *Lepomis macrochirus* in Ohio.

92-002848 Schiemer, Fritz and Wolfgang Wieser. EPILOGUE: FOOD AND FEEDING, ECOMORPHOLOGY, ENERGY ASSIMILATION AND CONVERSION IN CYPRINIDS. *Environ. Biol. Fishes* 33(1-2):223-227. 1992. FR 37(2)
[Inst. Zool., Univ. Wien, Althanstr. 14, A-1090 Vienna, Austria] *Rutilus rutilus.*

92-002849 Schwanck, Erkki and Krishen Rana. MALE-FEMALE PARENTAL ROLES IN *SAROTHERODON GALILAEUS* (PISCES: CICHLIDAE). *Ethology* 89(3):229-243. 1991. FR 37(2)
[Dep. Zool., Univ. Stockholm, S-106 91 Stockholm, Sweden] *Tilapia melanotheron.*

92-002850 Sherstyukov, A. I. and G. I. Nazarova. VERTICAL MIGRATIONS AND FEEDING OF 0-GROUP SILVER HAKE *(MERLUCCIUS BILINEARIS)* ON THE SCOTIAN SHELF, NOVEMBER 1985. *Northwest Atl. Fish. Organ. Sci. Counc. Stud.* No. 15. p. 53-58. 1991. FR 37(2)
[Atl. Res. Inst. Mar. Fish. & Oceanogr. (AtlantNIRO), 5 Dmitry Donskoy St., Kaliningrad 236000, USSR]

92-002851 Siepen, Gabriele and M.-Dominique Crapon de Caprona. THE INFLUENCE OF PARENTAL COLOR MORPH ON MATE CHOICE IN THE CICHLID FISH *CICHLASOMA NIGROFASCIATUM. Ethology* 73(1):187-200. 1986. FR 37(2)
[Fak. Biol., Postfach 8640, Univ. Bielefeld, D-4800 Bielefeld 1, Germany]

92-002852 Skorobogatov, M. A. and S. D. Pavlov. A STUDY OF THE ORIENTATION OF YOUNG ROACH, *RUTILUS RUTILUS,* WITH RESPECT TO CURRENT VELOCITY. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):142-148. 1991. FR 37(2) [Tverskoy Polytechnic Univ., Biol. Dep., Moscow State Univ., Moscow, USSR]

92-002853 Steele, Craig W. and Carol Skinner. NOVELTY IS NOT A BASIS FOR GENERALIZATION IN PREY SELECTION BY GOLDFISH. *Ohio J. Sci.* 92(2):59. 1992. Abstract only. FR 37(2)
[Dep. Biol. & Health Serv., Edinboro Univ., Edinboro, PA 16444] *Carassius auratus.*

92-002854 Sutterlin, A. M. and E. D. Stevens. THERMAL BEHAVIOUR OF RAINBOW TROUT AND ARCTIC CHAR IN CAGES MOORED IN STRATIFIED WATER. *Aquaculture* 102(1/2):65-75. 1992. FR 37(2)
[Bay D'Espoir Salmon Hatchery Ltd., P.O. Box 250, Milltown, NF, Canada, A0H 1W0] *Oncorhynchus mykiss* and *Salvelinus alpinus* in Canada.

92-002855 Tominaga, Osamu and Kazuya Nashida. [INTERSPECIFIC RELATIONSHIP BETWEEN BROWN SOLE *PLEURONECTES HERZENSTEINI* AND OTHER DEMERSAL FISHES IN THE COASTAL WATERS OF NORTHERN NIIGATA PREFECTURE.] *Bull. Jpn. Sea Natl. Fish. Res. Inst.* No. 41. p. 11-26. 1991. In Japanese with English summ. FR 37(2)
[Hokkaido Cent. Fish. Exp. Stn., Yoichi-cho, Hokkaido 046, Japan]

92-002856 Turner, B. J.; W. P. Davis and D. S. Taylor. ABUNDANT MALES IN POPULATIONS OF A SELFING HERMAPHRODITE FISH, *RIVULUS MARMORATUS,* FROM SOME BELIZE CAYS. *J. Fish Biol.* 40(2):307-310. 1992. FR 37(2)
[Dep. Biol., VPI&SU, Blacksburg, VA 24061]

92-002857 Uiblein, Franz. FOOD SEARCHING DECISIONS IN FOUR CYPRINID SPECIES. *Environ. Biol. Fishes* 33(1-2):47-52. 1992. FR 37(2)
[Inst. Limnol., Abteilung Mondsee, A-5310 Gaisberg 116, Austria] *Vimba elongata, Abramis brama, Chalcalburnus chalcoides,* and *Rutilus rutilus.*

BEHAVIOR (Continued)

92-002858 Veselov, A. E. and Yu. A. Shustov. SEASONAL BEHAVIORAL CHARACTERISTICS AND DISTRIBUTION OF JUVENILE LAKE SALMON, *SALMO SALAR SEBAGO*, IN RIVERS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):145-151. 1991. FR 37(2)

[Biol. Inst., Karelian Affiliated Soc., USSR Acad. Sci., Petrozavodsk, USSR]

92-002859 Walton, William E.; Nelson G. Hairston, Jr., and James K. Wetterer. GROWTH-RELATED CONSTRAINTS ON DIET SELECTION BY SUNFISH. *Ecology* 73(2):429-437. 1992. FR 37(2)

[Cent. Great Lakes Studies, Univ. Wis., 600 E. Greenfield Ave., Milwaukee 53204] *Lepomis gibbosus* and *L. macrochirus.*

92-002860 Wanzenbock, Josef. ONTOGENY OF PREY ATTACK BEHAVIOUR IN LARVAE AND JUVENILES OF THREE EUROPEAN CYPRINIDS. *Environ. Biol. Fishes* 33(1-2):23-32. 1992. FR 37(2)

[Inst. Zool., Univ. Vienna, Althanstr. 14, A-1090 Vienna, Austria] *Rutilus rutilus, Alburnus alburnus* and *Abramis ballerus.*

92-002861 Webb, Paul W. IS THE HIGH COST OF BODY/CAUDAL FIN UNDULATORY SWIMMING DUE TO INCREASED FRICTION DRAG OR INERTIAL RECOIL? *J. Exp. Biol.*Vol. 162. p. 157-166. 1992. FR 37(2)

[Univ. Mich., Dep. Biol. & School Nat. Resour., Ann Arbor 48109-1115] *Lepomis macrochirus.*

92-002862 Wieser, Wolfgang. INTRODUCTION TO THE ENVIRONMENTAL BIOLOGY OF EUROPEAN CYPRINIDS. *Environ. Biol. Fishes* 33(1-2):9-12. 1992. FR 37(2)

[Inst. Zool., Univ. Innsbruck, Technikerstr. 25, A-6020 Innsbruck, Austria]

92-002863 Winfield, Ian J.; Denise K. Winfield and Catherine M. Tobin. INTERACTIONS BETWEEN THE ROACH, *RUTILUS RUTILUS*, AND WATERFOWL POPULATIONS OF LOUGH NEAGH, NORTHERN IRELAND. *Environ. Biol. Fishes* 33(1-2):207-214. 1992. FR 37(2)

[Inst. Freshwater Ecol., Windermere Lab., Ambleside, Cumbria LA22 0LP, England]

92-002864 Winkler, Hans and Carmen P. Orellana. FUNCTIONAL RESPONSES OF FIVE CYPRINID SPECIES TO PLANKTONIC PREY. *Environ. Biol. Fishes* 33(1-2):53-62. 1992. FR 37(2)

[Konrad Lorenz-Inst. Vergleichende Verhaltensforschung Oesterreichischen Akad. Wissenschaften, Sayovenstr. 1A, A-1160 Vienna, Austria] *Chalcalburnus chalcoides, Vimba vimba, Abramis brama, Rutilus rutilus,* and *Scardinius erythrophthalmus.*

92-002865 Zhu, Yong; Kiyoshi Furukawa and Katsumi Aida. EFFECTS OF PHOTOPERIOD ON SPAWNING RHYTHM IN THE TOBINUMERI-DRAGONET *REPOMUCENUS BENITEGURI. Nippon Suisan Gakkaishi* 57(11):2033-2037. 1991. In English with Japanese summ. FR 37(2)

[Lab. Fish Physiol., Dep. Fish., Fac. Agric., Univ. Tokyo, Bunkyo, Tokyo 113, Japan]

LIFE HISTORY-GENERAL WORKS

92-002866 Branson, Branley Allan. THE MAMMOTH CAVE BLINDFISH. *Trop. Fish Hobbyist* 40(1):35, 39-40. 1991. FR 37(2)

Amblyopsis spelaea.

92-002867 Claro, Rodolfo; Alida Garcia-Cagide; Luis M. Sierra and Juan P. Garcia-Arteaga. [FISHERIES BIOLOGY OF THE NASSAU GROUPER, *EPINEPHELUS STRIATUS* (BLOCH) (PISCES: SERRANIDAE) IN THE CUBAN SHELF.] *Cienc. Biol. Acad. Cienc. Cuba* No. 23. p. 23-43. 1990. In Spanish with English summ. FR 37(2)

[Inst. Oceanol., Acad. Cienc. Cuba, Cuba]

92-002868 Ditty, James G.; Marty Bourgeois; Rick Kasprzak and Mark Konikoff. LIFE HISTORY AND ECOLOGY OF SAND SEATROUT *CYNOSCION ARENARIUS* GINSBURG, IN THE NORTHERN GULF OF MEXICO: A REVIEW. *Northeast Gulf Sci.* 12(1):35-47. 1991. FR 37(2)

[Coastal Fish. Inst., Cent. Wetland Resour., La. State Univ., Baton Rouge 70803-7503]

92-002869 European Inland Fisheries Advisory Commission. REPORT OF THE SEVENTH SESSION OF THE WORKING PARTY ON EEL, DUBLIN, IRELAND, 20-25 MAY, 1991. *EIFAC (Eur. Inland Fish. Advis. Comm.) Occas. Pap.* No. 25. 36p. 1991. FR 37(2)

Anguilla anguilla.

92-002870 Garrido, Orlando H. and Emilio Valdes-Munoz. [OBSERVATIONS ON THE BEHAVIOR OF *OPISTOGNATHUS MACROGNATHUS* (PISCES: OPISTOGNATHIDAE).] *Cienc. Biol. Acad. Cienc. Cuba* No. 23. p. 116-118. 1990. In Spanish. FR 37(2)

[Mus. Nac. Hist. Nat., Capitolio, Havana, Cuba]

92-002871 Hofer, Rudolf and Franz Bucher. [THE BIOLOGY AND REPRODUCTION OF THE BULLHEAD.] *Oesterreichs Fischerei* 44(7):158-161. 1991. In German with English summ. FR 37(2)

[Inst. Zool. Univ. Innsbruck, A-6020 Innsbruck, Technikerstr. 25, Innsbruck, Austria] *Cottus gobio.*

LIFE HISTORY-GENERAL WORKS (Continued)

92-002872 Jellyman, Don. SEA-RUN BROWNS - HOW MUCH DO WE KNOW? *Freshwater Catch* No. 47. p. 11-12. 1991. FR 37(2)

[MAF Fish., Freshwater Cent., Christchurch, New Zealand] *Salmo trutta* in New Zealand.

92-002873 Joyeux, J.-C.; J.-L. Bouchereau and J.-A. Tomasini. [GROWTH AND DEMOGRAPHIC STRUCTURE OF THE POPULATION OF *GOBIUS NIGER* LINNE, 1758 (TELEOSTEI) IN A NORTHERN MEDITERRANEAN LAGOON.] *Cah. Biol. Mar.* 32(4):415-437. 1991. In French with English summ. FR 37(2)

[Lab. Ichthyol., Dep. Aquacult. & Halieutique, Univ. Montpellier II, Sci. & Tech., Pl. E. Bataillon, F-34095 Montpellier Cedex 5, France]

92-002874 Knight, Jeremy G. and Stephen T. Ross. REPRODUCTION, AGE AND GROWTH OF THE BAYOU DARTER *ETHEOSTOMA RUBRUM* (PISCES, PERCIDAE): AN ENDEMIC OF BAYOU PIERRE. *Am. Midl. Nat.* 127(1):91-105. 1992. FR 37(2)

[Univ. South. Miss., S.S. Box 5018, Hattiesburg 39406-5018]

92-002875 Korolev, V. V. THE COMMON SCULPIN, *COTTUS GOBIO*, OF THE UPPER PECHORA RIVER BASIN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):36-41. 1991. FR 37(2)

[Pechoro-Ilychskiy Natl. Park, Yaksha, Komi SSR, USSR]

92-002876 Kramer, Sharon Hendrix. THE SHALLOW-WATER FLATFISHES OF SAN DIEGO COUNTY. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 128-142. 1991. In English with Spanish summ. FR 37(2)

[Australian Inst. Mar. Sci., PMB No. 3, Townsville M.C., Qld. 4810, Australia] *Paralichthys californicus, Xystreurys liolepis, Citharichthys stigmaeus, Pleuronichthys verticalis, P. ritteri, Hypsopsetta guttulata,* and *Symphurus atricauda* in California.

92-002877 Lei, F. Y. and B. X. Wang. [STUDIES ON REPRODUCTION AND GROWTH OF LOACH.] *Acta Hydrobiol. Sin.* 14(1):60-67. 1990. In Chinese with English summ. From Anim. Breed. Abstr. 60(1):678. 1992. FR 37(2)

[Fish. Res. Inst. Hunan, Yuanjiang, China] *Misgurnus anguillicaudatus.*

92-002878 Macer, C. T. THE ATLANTIC COD. *Biologist* 38(5):189-193. 1991. FR 37(2)

[MAFF, Dir. Fish. Res., Fish. Lab., Lowestoft, Suffolk NR33 0HT, England] *Gadus morhua.*

92-002879 Nagata, Yoshikazu. [RESEARCH ON THE JAPANESE NATIVE FISH *RHODEUS OCELLATUS SMITHI* AND PROBLEMS OF CONSERVATION.] *Anim. Zoos* 44(2):12-15. 1992. In Japanese. FR 37(2)

92-002880 Rader, Kathleen. JAWFISH. *Colo. Aquarist* p. 21-26. Winter 1991. FR 37(2)

Opistognathus, Lonchopisthus, and *Stalix.*

92-002881 Roshchin, E. A. ASPECTS OF THE LIFE CYCLE OF *TREMATOMUS EULEPIDOTUS* (NOTOTHENIIDAE) IN THE INDIAN OCEAN SECTOR OF THE ANTARCTIC. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):1-11. 1991. FR 37(2)

[Azov-Black Sea Res. Inst., Sea Fish. & Oceanogr., AzcherNIRO, Kerch, USSR]

92-002882 Schumacher, James D. and Arthur W. Kendall, Jr. SOME INTERACTIONS BETWEEN YOUNG WALLEYE POLLOCK AND THEIR ENVIRONMENT IN THE WESTERN GULF OF ALASKA. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 22-40. 1991. In English with Spanish summ. FR 37(2)

[Pac. Mar. Environ. Lab., 7600 Sand Point Way NE, Seattle, WA 98115] *Theragra chalcogramma.*

92-002883 Simonson, Timothy D. and Richard J. Neves. HABITAT SUITABILITY AND REPRODUCTIVE TRAITS OF THE ORANGEFIN MADTOM *NOTURUS GILBERTI* (PISCES: ICTALURIDAE). *Am. Midl. Nat.* 127(1):115-124. 1992. FR 37(2)

[Bur. Res., Dep. Nat. Resour., 1350 Femrite Dr., Monona, WI 53716] *Percina roanoka* in Virginia.

92-002884 Spies, Gunter. LITTLE KNOWN AND SELDOM SEEN: THE TINY CORAL GOBIES OF THE GENUS *BRYANINOPS. Trop. Fish Hobbyist* 40(1):78-81, 83. 1991. FR 37(2)

B. natans and *B. tigris.*

92-002885 Sumpton, Wayne. DISTRIBUTION AND GROWTH OF FOUR SPECIES OF JUVENILE MARINE FISH IN THE LOGAN AND ALBERT RIVERS, SE QUEENSLAND. *Proc. R. Soc. Queensl.* No. 99. p. 101-109. 1988. FR 37(2)

[Queensland Dep. Primary Ind., South. Fish. Res. Cent., P.O. Box 76, Deception Bay, Qld. 4508, Australia] *Arius australis, Johniops vogleri, Aseraggodes macleayanus,* and *Polydactylus multiradiatus* in Australia.

92-002886 Viljanen, M. and J. Koho. THE EFFECTS OF EGG SIZE AND INCUBATION CONDITIONS ON LIFE HISTORY OF VENDACE (*COREGONUS ALBULA* L.). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2418-2423. 1989. FR 37(2)

[Univ. Joensuu, Karelian Inst., Saimaa Res., Box 111, SF-80101 Joensuu, Finland]

LIFE HISTORY-GENERAL WORKS (Continued)

92-002887 Wilkerling, Klaus. THE COCKATOO DWARF CICHLID. *Trop. Fish Hobbyist* 40(1):10-13. 1991. FR 37(2)

Apistomgramma cacatuoides.

POPULATION STUDIES, PRODUCTION, RECRUITMENT, ETC.

92-002888 Allen, M. James and Kevin T. Herbinson. BEAM-TRAWL SURVEY OF BAY AND NEARSHORE FISHES OF THE SOFT-BOTTOM HABITAT OF SOUTHERN CALIFORNIA IN 1989. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 112-127. 1991. In English with Spanish summ. FR 37(2)

[MBC Appl. Environ. Sci., 947 Newhall St., Costa Mesa, CA 92627] *Paralichthys californicus.*

92-002889 Barak, N. A.-E. and C. F. Mason. POPULATION DENSITY, GROWTH AND DIET OF EELS, *ANGUILLA ANGUILLA* L., IN TWO RIVERS IN EASTERN ENGLAND. *Aquacult. Fish. Manage.* 23(1):59-70. 1992. FR 37(2)

[Mason: Dep. Biol., Univ. Essex, Wivenhoe Park, Colchester, Essex CO4 3SQ, England]

92-002890 Colvin, Michael A. POPULATION CHARACTERISTICS AND ANGLER HARVEST OF WHITE CRAPPIES IN FOUR LARGE MISSOURI RESERVOIRS. *N. Am. J. Fish. Manage.* 11(4):572-584. 1991. FR 37(2)

[Dep. Conserv., 1110 S. College Ave., Columbia, MO 65201] *Pomoxis annularis.*

92-002891 Crandell, Patricia A. and Graham A. E. Gall. BODY WEIGHT ANALYSIS FOR INDIVIDUALLY TAGGED RAINBOW TROUT: MALES, FEMALES AND PRECOCIOUS MALES. *Aquaculture* 100(1-3):99. 1992. Abstract only. FR 37(2)

[Dep. Anim. Sci., Univ. Calif., Davis 95616-8521] *Oncorhynchus mykiss.*

92-002892 Cross, Beverly A. and Barry L. Stratton. ORIGINS OF SOCKEYE SALMON IN EAST SIDE BRISTOL BAY FISHERIES IN 1988 BASED ON LINEAR DISCRIMINANT FUNCTION ANALYSIS OF SCALE PATTERNS. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-09. 71p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., 333 Raspberry Rd., Anchorage, AK 99518] *Oncorhynchus nerka* in Alaska.

92-002893 D'yakov, Yu. P. POPULATION STRUCTURE OF PACIFIC BLACK HALIBUT, *REINHARDTIUS HIPPOGLOSSOIDES. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):16-28. 1991. FR 37(2)

[Kamchatka Branch, Pac. Fish. & Oceanogr. Res. Inst., Petropavlovsk-Kamchatskiy, USSR]

92-002894 de Silva, K. H. G. M. POPULATION DYNAMICS AND PRODUCTION OF THE ROCKY STREAM-DWELLING FISH *GARRA CEYLONENSIS* (CYPRINIDAE) IN SRI LANKA. *J. Trop. Ecol.* 7(3):289-303. 1991. FR 37(2)

[Dep. Zool., Univ. Peradeniya, Peradeniya, Sri Lanka]

92-002895 Eckmann, Reiner and Martin Pusch. AT WHAT LIFE STAGE IS YEAR-CLASS STRENGTH OF COREGONIDS (*COREGONUS LAVARETUS* L.) IN LAKE CONSTANCE DETERMINED? *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2465-2469. 1989. FR37(2)

[Limnol. Inst., Univ. Constance, P.O. Box 5560, D-7750 Constance, Germany]

92-002896 Hudy, Mark. BROWN TROUT POPULATION STRUCTURES IN WHITE RIVER TAILWATERS CURRENTLY MANAGED UNDER NO SPECIAL REGULATIONS. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 94-97. 1990. FR 37(2)

[Game & Fish Comm., 201 E. Fifth St., Mountain Home, AR 72651] *Salmo trutta* in Arkansas.

92-002897 Jennings, S. and M. G. Pawson. THE ORIGIN AND RECRUITMENT OF BASS, *DICENTRARCHUS LABRAX*, LARVAE TO NURSERY AREAS. *J. Mar. Biol. Assoc. U.K.* 72(1):199-212. 1992. FR 37(2)

[Minist. Agric., Fish. & Food, Dir. Fish. Res., Fish. Lab., Lowestoft, Suffolk NR33 0HT, England]

92-002898 Karaseva, E. M. SIZE CHANGE AND SPATIAL DISTRIBUTION CHARACTERISTICS OF LARVAL HERRING, *CLUPEA HARENGUS*, IN NATURAL HIGH-DENSITY POPULATIONS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):133-142. 1991. FR 37(2)

[Atl. Sci. Inst. Fish. & Oceanogr., Kaliningrad, USSR]

92-002899 King, Bruce E. and Kenneth E. Tarbox. UPPER COOK INLET SALMON ESCAPEMENT STUDIES, 1990. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-21. 62p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus nerka* in Alaska.

92-002900 King, Bruce E. and Kenneth E. Tarbox. UPPER COOK INLET SALMON ESCAPEMENT STUDIES, 1989. *Alsk. Dep. Fish Game Tech. Rep.* No. 91-20. 104p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus nerka* in Alaska.

POPULATION STUDIES, PRODUCTION, RECRUITMENT, ETC. (Continued)

92-002901 Larson, Scott C.; Bruce Saul and Steve Schleiger. EXPLOITATION AND SURVIVAL OF BLACK CRAPPIES IN THREE GEORGIA RESERVOIRS. *N. Am. J. Fish. Manage.* 11(4):604-613. 1991. FR 37(2)
[Dep. Nat. Resour., Rt. 2, Box 566, Summerville, GA 30747] *Pomoxis nigromaculatus.*

92-002902 Markarova, I. A.; A. P. Alekperov and T. S. Zarbalina. PRESENT STATUS OF THE SPAWNING RUN OF SHEAP STURGEON, *ACIPENSER NUDIVENTRIS*, IN THE KURA RIVER. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):17-22. 1991. FR 37(2)
[Azerbaijan Sect., Caspian Sci. Res. Inst. Fish., Baku, USSR]

92-002903 Martini, F. and J. B. Heiser. A POPULATION PROFILE FOR A COMMUNITY OF HAGFISH, *MYXINE GLUTINOSA*. *Am. Zool.* 31(5):35A. 1991. Abstract only. FR 37(2)
[Shoals Mar. Lab., Cornell Univ., Ithaca, NY]

92-002904 McBride, Richard S. and David O. Conover. RECRUITMENT OF YOUNG-OF-THE-YEAR BLUEFISH *POMATOMUS SALTATRIX* TO THE NEW YORK BIGHT: VARIATION IN ABUNDANCE AND GROWTH OF SPRING- AND SUMMER-SPAWNED COHORTS. *Mar. Ecol. Prog. Ser.* 78(3):205-216. 1991. FR 37(2)
[Mar. Field Stn., Inst. Mar. & Coastal Sci., Rutgers Univ., Box 278, Tuckerton, NJ 08087]

92-002905 McInerny, Michael C. and Donald J. Degan. DYNAMICS OF A BLACK CRAPPIE POPULATION IN A HETEROGENEOUS COOLING RESERVOIR. *N. Am. J. Fish. Manage.* 11(4):525-533. 1991. FR 37(2)
[Dep. Nat. Resour., 20596 Hwy. 7, Hutchinson, MN 55350] *Pomoxis nigromaculatus* and *Dorosoma petenense* in South Carolina and North Carolina.

92-002906 Melvin, Gary D. A REVIEW OF STRIPED BASS, *MORONE SAXATILIS*, POPULATION BIOLOGY IN EASTERN CANADA. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 1-11. 1991. FR 37(2)
[Mar. Fish Div., Dep. Fish. & Oceans Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

92-002907 Merrett, N. R. DEMERSAL ICHTHYOFAUNAL DISTRIBUTION IN THE ABYSSAL EASTERN NORTH ATLANTIC, WITH SPECIAL REFERENCE TO *CORYPHAENOIDES (NEMATONURUS) ARMATUS* (MACROURIDAE). *J. Mar. Biol. Assoc. U.K.* 72(1):5-24. 1992. FR 37(2)
[Zool. Dep., Nat. Hist. Mus., Cromwell Rd., London SW7 5BD, England]

92-002908 Mitzner, Larry. EFFECT OF ENVIRONMENTAL VARIABLES UPON CRAPPIE YOUNG, YEAR-CLASS STRENGTH, AND THE SPORT FISHERY. *N. Am. J. Fish. Manage.* 11(4):534-542. 1991. FR 37(2)
[Dep. Nat. Resour., Chariton Res. Stn., Rt. 1, Box 209, Chariton, IA 50049] *Pomoxis* in Iowa.

92-002909 Norcross, Brenda L. ESTUARINE RECRUITMENT MECHANISMS OF LARVAL ATLANTIC CROAKERS. *Trans. Am. Fish. Soc.* 120(6):673-683. 1991. FR 37(2)
[Inst. Mar. Sci., School Mar. Sci., Coll. William & Mary, Gloucester Point, VA 23062] *Micropogonias undulatus.*

92-002910 Pigg, Jimmie. DECREASING DISTRIBUTION AND CURRENT STATUS OF THE ARKANSAS RIVER SHINER, *NOTROPIS GIRARDI*, IN THE RIVERS OF OKLAHOMA AND KANSAS. *Proc. Okla. Acad. Sci.* Vol. 71. p. 5-15. 1991. FR 37(2)
[State Environ. Lab. Serv., Okla. State Dep. Health, Oklahoma City 73152]

92-002911 Pigg, Jimmie; Robert Gibbs and Hutchie Weeks. RECENT INCREASES IN NUMBER OF SKIPJACK HERRING, *ALOSA CHRYSOCHLORIS* (RAFINESQUE), IN THE ARKANSAS RIVER, OKLAHOMA. *Proc. Okla. Acad. Sci.* Vol. 71. p. 49-50. 1991. FR 37(2)
[State Dep. Health, State Environ. Lab., Oklahoma City, OK 73152]

92-002912 Pont, D.; A. J. Crivelli and F. Guillot. THE EFFECT OF COLONIZATION OF THREE-SPINED STICKLEBACKS ON THE HELEOPLANKTON IN A FISH-FREE POOL. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2437. 1989. Abstract only. FR 37(2)
[Lab. Ecol. Syst. Fluviaux, Univ. Lyon I, 1 rue Parmentier, F-13200 Arles, France] *Gasterosteus aculeatus* in France.

92-002913 Reed, Jeffrey R. and William D. Davies. POPULATION DYNAMICS OF BLACK CRAPPIES AND WHITE CRAPPIES IN WEISS RESERVOIR, ALABAMA: IMPLICATIONS FOR THE IMPLEMENTATION OF HARVEST RESTRICTIONS. *N. Am. J. Fish. Manage.* 11(4):598-603. 1991. FR 37(2)
[Dep. Nat. Resour., 1110 N. Lakeshore Dr., Glenwood, MN 56334] *Pomoxis nigromaculatus* and *P. annularis.*

92-002914 Toivonen, Jorma. THE FISH POPULATIONS AND FISHERIES IN SMALL FOREST LAKES IN FINLAND. *Finn. Fish. Res.* Vol. 12. p. 19-24. 1991. FR 37(2) [Finnish Game & Fish. Res. Inst., Enonkoski State Aquacult. & Fish. Res. Stn., SF-58175 Enonkoski, Finland] Data for 17 species.

92-002915 Tupper, M. and I. Hunt von Herbing. DENSITY DEPENDENT RECRUITMENT IN A CORAL REEF FISH. *Am. Zool.* 31(5):125A. 1991. Abstract only. FR 37(2)
[Bellairs Res. Inst., McGill Univ., Barbados, West Indies] *Thalassoma bifasciatum* in Barbados.

POPULATION STUDIES, PRODUCTION, RECRUITMENT, ETC. (Continued)

92-002916 Tupper, M. H. and W. Hunte. EFFECTS OF JUVENILE AND ADULT DENSITY ON RECRUITMENT RATE OF REEF FISH IN BARBADOS. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 70. 1988. English and Spanish poster only. FR 37(2)

[Bellairs Res. Inst., McGill Univ., St. James, Barbados, West Indies]

92-002917 Tyler, A. V. and W. R. Crawford. MODELING OF RECRUITMENT PATTERNS IN PACIFIC COD (*GADUS MACROCEPHALUS*) IN HECATE STRAIT, BRITISH COLUMBIA. *Can. J. Fish. Aquat. Sci.* 48(11):2240-2249. 1991. In English with French summ. FR 37(2)

[School Fish. & Ocean Sci., Univ. Alaska, Fairbanks 99775-1090]

92-002918 Waltemyer, David L. ABUNDANCE, AGE, SEX AND SIZE OF CHINOOK, SOCKEYE, COHO, AND CHUM SALMON RETURNING TO UPPER COOK INLET, ALASKA IN 1989. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-17. 209p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus tshawytscha, O. kisutch, O. nerka* and *O. keta*.

92-002919 Waltemyer, David L. and Kenneth E. Tarbox. STOCK COMPONENT OF AGE-1.3 SOCKEYE SALMON RETURNING TO UPPER COOK INLET, 1987-1989. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-16. 40p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus nerka* in Alaska.

92-002920 Woolington, James D.; Beverly A. Cross and Barry L. Stratton. BRISTOL BAY SOCKEYE SALMON SMOLT STUDIES FOR 1989. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-19. 84p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus nerka* in Alaska.

SPAWNING HABITS AND MOVEMENTS, FECUNDITY, ETC.

92-002921 Beamish, Richard J. and Chrys-Ellen M. Neville. THE IMPORTANCE OF SIZE AS AN ISOLATING MECHANISM IN LAMPREYS. *Copeia* 1992(1):191-196. 1992. FR 37(2)

[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6] *Lampetra richardsoni* and *L. ayresi* in Canada.

92-002922 Beard, Thomas D., Jr. and Robert F. Carline. INFLUENCE OF SPAWNING AND OTHER STREAM HABITAT FEATURES ON SPATIAL VARIABILITY OF WILD BROWN TROUT. *Trans. Am. Fish. Soc.* 120(6):711-722. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Coop. Fish. & Wildl. Res. Unit, Pa. State Univ., 7 Ferguson Bldg., University Park 16802] *Salmo trutta* in Pennsylvania.

92-002923 Bell, J. D.; J. M. Lyle; C. M. Bulman; K. J. Graham; G. M. Newton and D. C. Smith. SPATIAL VARIATION IN REPRODUCTION, AND OCCURRENCE OF NON-REPRODUCTIVE ADULTS, IN ORANGE ROUGHY, *HOPLOSTETHUS ATLANTICUS* COLLETT (TRACHICHTHYIDAE), FROM SOUTH-EASTERN AUSTRALIA. *J. Fish Biol.* 40(1):107-122. 1992. FR 37(2)

[Fish. Res. Inst., New South Wales Fish., P.O. Box 21, Cronulla, N.S.W. 2230, Australia]

92-002924 Castro, Leonardo R. and Robert K. Cowen. ENVIRONMENTAL FACTORS AFFECTING THE EARLY LIFE HISTORY OF BAY ANCHOVY *ANCHOA MITCHILLI* IN GREAT SOUTH BAY, NEW YORK. *Mar. Ecol. Prog. Ser.* 76(3):235-247. 1991. FR 37(2)

[Mar. Sci. Res. Cent., SUNY, Stony Brook, NY 11794-5000]

92-002925 Estay, Francisco; Nelson Diaz and Jorge Mella. [REPRODUCTIVE GONADAL CYCLE OF A POPULATION OF RAINBOW TROUT, *ONCORHYNCHUS MYKISS*, OF CENTRAL CHILE.] *Medio Ambiente* 11(1):15-23. 1990. In Spanish with English summ. FR 37(2)

[Dep. Cienc. Ecol., Fac. Cienc., Univ. Chile, Casilla 653, Santiago, Chile]

92-002926 Grier, H. J. ENVIRONMENTAL CONTROL OF REPRODUCTION IN A LIVEBEARING FISH. *Am. Zool.* 31(5):36A. 1991. Abstract only. FR 37(2)

[Univ. S. Fla., Tampa] *Poecilia latipinna* in Florida.

92-002927 Grost, Richard T.; Wayne A. Hubert and Thomas A. Wesche. DESCRIPTION OF BROWN TROUT REDDS IN A MOUNTAIN STREAM. *Trans. Am. Fish. Soc.* 120(5):582-588. 1991. FR 37(2)

[Harza Northwest, Inc., Bellevue, WA 98009] *Salmo trutta* in Wyoming.

92-002928 Haldorson, Lewis and Milton Love. MATURITY AND FECUNDITY IN THE ROCKFISHES, *SEBASTES* SPP., A REVIEW. *Mar. Fish. Rev.* 53(2):25-31. 1991. FR 37(2)

[School Fish. & Ocean Sci., Univ. Alaska, Juneau 99803]

SPAWNING HABITS AND MOVEMENTS, FECUNDITY, ETC. (Continued)

92-002929 Hartmann, Jurgen. [PERFECT TIMING OF FISHING FOR MATURE FEMALE WHITEFISH (*COREGONUS LAVARETUS*) OF LAKE CONSTANCE?] *Oesterreichs Fischerei* 44(10):229-235. 1991. In German with English summ. FR 37(2)

[Inst. Seeforschung, Untere Seestr. 81, D-7994 Langenargen, Germany]

92-002930 Hunt von Herbing, I. and W. Hunte. SPAWNING AND RECRUITMENT IN THE BLUEHEAD WRASSE, *THALASSOMA BIFASCIATUM*. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 61. 1988. English and Spanish poster only. FR 37(2)

[Bellairs Res. Inst. McGill Univ., St. James, Barbados, West Indies]

92-002931 Kinney, Todd A. and John D. Lynch. THE FECUNDITY AND REPRODUCTIVE SEASON OF *FUNDULUS SCIADICUS* IN NEBRASKA (ACTINOPTERYGII: FUNDULIDAE). *Trans. Nebr. Acad. Sci.* Vol. 18. p. 101-104. 1991. FR 37(2)

[School Biol. Sci., Univ. Nebr., Lincoln 68588-0118]

92-002932 Lahti, Erkki. THE ENERGY CONTENT AND CHEMICAL COMPOSITION OF EGGS, MUSCLE AND LIVER IN WINTER SPAWNING VENDACE (*COREGONUS ALBULA* L.) BEFORE SPAWNING. *Arch. Hydrobiol.* 122(3):373-379. 1991. FR 37(2)

[Dep. Appl. Zool., Univ. Kuopio, P.O. Box 1627, SF-70211 Kuopio 21, Finland]

92-002933 Lluch-Belda, Daniel; Daniel B. Lluch-Cota; Sergio Hernandez-Vazquez; Cesar A. Salinas-Zavala and Richard A. Schwartzlose. SARDINE AND ANCHOVY SPAWNING AS RELATED TO TEMPERATURE AND UPWELLING IN THE CALIFORNIA CURRENT SYSTEM. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 105-111. 1991. In English with Spanish summ. FR 37(2)

[Cent. Invest. Biol., A.C., Apdo. Postal 128, La Paz, Baja California Sur, Mexico 23070] *Sardinops* and *Engraulis*.

92-002934 Luo, Jiangang and John A. Musick. REPRODUCTIVE BIOLOGY OF THE BAY ANCHOVY IN CHESAPEAKE BAY. *Trans. Am. Fish. Soc.* 120(6):701-710. 1991. FR 37(2)

[Inst. Mar. Sci., Coll. William & Mary, Gloucester Point, VA 23062] *Anchoa mitchilli*.

92-002935 Makuhina, L. I.; N. B. Markevich and T. Ya. Chechun. ESTIMATES OF QUALITY OF FIRST-SPAWNING, TWO-YEAR-OLD STEELHEAD TROUT ACCORDING TO SOME FISHERY INDICES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):151-156. 1991. FR 37(2)

Oncorhynchus mykiss.

92-002936 Middaugh, Douglas P. and Michael J. Hemmer. REPRODUCTIVE ECOLOGY OF THE INLAND SILVERSIDE, *MENIDIA BERYLLINA*, (PISCES: ATHERINIDAE) FROM BLACKWATER BAY, FLORIDA. *Copeia* 1992(1):53-61. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Environ. Res. Lab., Gulf Breeze, FL 32561]

92-002937 Parmanne, Raimo and Eero Kuittinen. COMPARISON OF FECUNDITY OF HERRING (*CLUPEA HARENGUS* L.) IN VARIOUS AREAS OF THE NORTHERN BALTIC SEA. *Finn. Fish. Res.* Vol. 12. p. 157-164. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-002938 Pavlov, D. A. and Ye. K. Radzikhovskaya. REPRODUCTION BIOLOGY OF WHITE SEA WOLFFISH, *ANARHICHAS MARISALBI*, BASED ON EXPERIMENTAL STUDIES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):52-62. 1991. FR 37(2)

[Biol. Dep., Moscow State Univ., Moscow, USSR]

92-002939 Peres, Monica Brick and Carolus Maria Vooren. SEXUAL DEVELOPMENT, REPRODUCTIVE CYCLE, AND FECUNDITY OF THE SCHOOL SHARK *GALEORHINUS GALEUS* OFF SOUTHERN BRAZIL. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):655-667. 1991. FR 37(2)

[Fundacao Univ. Rio Grande, Dep. Oceanogr., C.P. 474, 96200 Rio Grande, RS, Brazil]

92-002940 Privitera, Lisa A. REPRODUCTIVE BIOLOGY OF *ASTERROPTERYX SEMIPUNCTATUS* (PISCES: GOBIIDAE) IN KANEOHE BAY, OAHU. *Pac. Sci.* 46(1):102. 1992. Abstract only. FR 37(2)

[Dep. Zool. & Inst. Mar. Biol., Univ. Hawaii Manoa, Honolulu 96822]

92-002941 Savenkova, T. P. and A. Yu. Asanov. THE CASPIAN SILVERSIDE, *ATHERINA BOYERI CASPIA*, IN THE LOWER REACHES OF THE ATREK RIVER. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):134-138. 1991. FR 37(2)

[Turkmen Div., Caspian Fish. Res. Inst. (ToKaspNIRKh), Krasnovodsk, USSR]

92-002942 Schultz, Eric T.; Lisa M. Clifton and Robert R. Warner. ENERGETIC CONSTRAINTS AND SIZE-BASED TACTICS: THE ADAPTIVE SIGNIFICANCE OF BREEDING-SCHEDULE VARIATION IN A MARINE FISH (EMBIOTOCIDAE: *MICROMETRUS MINIMUS*). *Am. Nat.* 138(6):1408-1430. 1991. FR 37(2)

[Mar. Sci. Res. Cent., SUNY, Stony Brook, NY 11794-5000]

SPAWNING HABITS AND MOVEMENTS, FECUNDITY, ETC. (Continued)

92-002943 Sminkey, Thomas R. and Christopher R. Tabit. REPRODUCTIVE BIOLOGY OF THE CHAIN DOGFISH, *SCYLIORHINUS RETIFER*, FROM THE MID-ATLANTIC BIGHT. *Copeia* 1992(1):251-253. 1992. FR 37(2)

[Inst. Mar. Sci., Coll. William & Mary, Gloucester Point, VA 23062]

92-002944 Srivastava, Rakesh Kumar and Joseph A. Brown. THE BIOCHEMICAL CHARACTERISTICS AND HATCHING PERFORMANCE OF CULTURED AND WILD ATLANTIC SALMON *(SALMO SALAR)* EGGS. *Can. J. Zool.* 69(9):2436-2441. 1991. In English with French summ. FR 37(2)

[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-002945 Tachihara, Katsunori and Seiro Kimura. [MATURITY AND SPAWNING OF LAND LOCKED AYU *PLECOGLOSSUS ALTIVELIS ALTIVELIS* IN LAKE IKEDA, KAGOSHIMA PREFECTURE.] *Nippon Suisan Gakkaishi* 57(12):2187-2192. 1991. In Japanese with English summ. FR 37(2)

[Aquacult. Res. Lab., Nagasaki Prefectural Inst. Fish., Nomozaki-cho, Nagasaki 851-05, Japan]

92-002946 Tominaga, Osamu; Kazuya Nashida; Tatsuaki Maeda; Toyomi Takahashi and Kazunori Kato. [ANNUAL LIFE CYCLE AND DISTRIBUTION OF ADULT RIGHTEYE FLOUNDER *PLEURONECTES HERZENSTEINI* IN THE COASTAL WATERS OF NORTHERN NIIGATA PREFECTURE.] *Nippon Suisan Gakkaishi* 57(11):2023-2031. 1991. In Japanese with English summ. FR 37(2)

[Hokkaido Cent. Fish. Exp. Stn., Yoichi 046, Japan]

92-002947 Veshchev, P. V. CHARACTERISTICS OF SPAWNING STOCKS AND REPRODUCTION OF VOLGA STELLATE STURGEON, *ACIPENSER STELLATUS*, UNDER NEW ECOLOGICAL CONDITIONS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):121-132. 1991. FR 37(2)

[Caspian Fish. Res. Inst., Astrakhan, USSR]

92-002948 Vronskii, B. B. and V. N. Leman. SPAWNING STATIONS, HYDROLOGICAL REGIME AND SURVIVAL OF PROGENY IN NESTS OF CHINOOK SALMON, *ONCORHYNCHUS TSHAWYTSCHA*, IN THE KAMCHATKA RIVER BASIN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):91-102. 1991. FR 37(2)

[Kamchatka Div. Pac. Res. Inst., Fish. & Oceanogr. (KoTINRO), Petropavlovsk-Kamchatskii, Kamchatskii, USSR]

92-002949 Vustyanyuk, A. V. and I. V. Sedletsky. SUBSTRATE PREFERENCE AND BEHAVIOR IN FRECKLED GOBY (PISCES; GOBIIDAE): AQUARIUM AND WILD NATURE OBSERVATIONS (HAJIBEI ESTUARY, NW BLACK SEA). *Am. Zool.* 31(5):11A. 1991. Abstract only. FR 37(2)

[Mechnikov State Univ., Odessa, USSR] *Pomatoschistus minutus elongatus.*

92-002950 Wernerus, Francois M. and Valentina Tessari. THE INFLUENCE OF POPULATION DENSITY ON THE MATING SYSTEM OF *THALASSOMA PAVO*, A PROTOGYNOUS MEDITERRANEAN LABRID FISH. *Mar. Ecol.* 12(4):361-368. 1991. FR 37(2)

[Stn. Rech. Sous-mar. & Oceanogr. STARESO, B.P. 33, F-20260 Calvi, France]

92-002951 Wetzel, J. and J. P. Wourms. PATERNAL-EMBRYONIC RELATIONSHIPS IN PIPEFISHES AND SEAHORSES (SYNGNATHIDAE). *Am. Zool.* 31(5):83A. 1991. Abstract only. FR 37(2)

[Presbyterian Coll., Clinton, SC] *Hippocampus.*

92-002952 Wourms, J. P. and H. G. Moser. VIVIPARITY IN THE GALAPAGOS THERMAL VENTFISH, *BYTHITES HOLLISI* (OPHIDIFORMES). *Am. Zool.* 31(5):84A. 1991. Abstract only. FR 37(2)

[Clemson Univ., Clemson, SC]

92-002953 Zamarro, Javier. BATCH FECUNDITY AND SPAWNING FREQUENCY OF YELLOWTAIL FLOUNDER *(LIMANDA FERRUGINEA)* ON THE GRAND BANK. *Northwest Atl. Fish. Organ. Sci. Counc. Stud.* No. 15. p. 43-51. 1991. FR 37(2)

[Inst. Invest. Mar., Muelle Bouzas, Vigo (Pontevedra), Spain]

MOVEMENTS, SEASONAL AND DEPTH DISTRIBUTION, ETC.

92-002954 Doyon, Jean-Francois; Christiane Hudon; Roderick Morin and F. G. Whoriskey, Jr. [SHORT TERM BENEFITS OF SEASONAL ANADROMOUS MOVEMENTS FOR A POPULATION OF BROOK TROUT (*SALVELINUS FONTINALIS*) NOUVEAU QUEBEC.] *Can. J. Fish. Aquat. Sci.* 48(11):2212-2222. 1991. In French with English summ. FR 37(2)

[Whoriskey: Dep. Renewable Resour., Macdonald Coll., McGill Univ., 21111 Lakeshore Rd., Ste-Anne-de-Bellevue, PQ, Canada H9X 1CO]

92-002955 Furan, Paul Rodney. DISTRIBUTIONS AND DIEL HABITAT UTILIZATION PATTERNS OF THE FAMILY HOLOCENTRIDAE ON A JAMAICAN NORTH SHORE REEF. *M.S. thesis, Auburn Univ.* 52p. 1986. FR 37(2)

Myripristis jacobus, Holocentrus marianus, H. rufus, and *H. vexillarius.*

MOVEMENTS, SEASONAL AND DEPTH DISTRIBUTION, ETC. (Continued)

92-002956 Gordoa, Ana and Carlos M. Duarte. SIZE-DEPENDENT SPATIAL DISTRIBUTION OF HAKE (*MERLUCCIUS CAPENSIS* AND *MERLUCCIUS PARADOXUS*) IN NAMIBIAN WATERS. *Can. J. Fish. Aquat. Sci.* 48(11):2095-2099. 1991. In English with French summ. FR 37(2)
[Inst. Cienc. Mar, Paseo Nac. s/n, 08003 Barcelona, Spain]

92-002957 Grass, Alan F. VAN ARSDALE FISHERIES STATION, 1989-90. *Calif. Dep. Fish Game Inland Fish. Admin. Rep.* No. 91-15. 7p. 1991. FR 37(2)
Oncorhynchus mykiss and *O. tshawytscha* in California.

92-002958 Hasegawa, Seizo; Toru Nagasawa and Mayumi Watanabe. [INVESTIGATION OF THE MIGRATION AND DISTRIBUTION PATTERNS OF COMMON MACKEREL, *SCOMBER JAPONICUS*, AS VIEWED FROM TAGGING EXPERIMENTS.] *Bull. Jpn. Sea Natl. Fish. Res. Inst.* No. 41. p. 1-10. 1991. In Japanese with English summ. FR 37(2)
[Japan Sea Natl. Fish. Res. Inst., Suido-cho, Niigata 951, Japan]

92-002959 Irvine, James R. and N. Thomas Johnston. COHO SALMON (*ONCORHYNCHUS KISUTCH*) USE OF LAKES AND STREAMS IN THE KEOGH RIVER DRAINAGE, BRITISH COLUMBIA. *Northwest Sci.* 66(1):15-25. 1992. FR 37(2)
[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-002960 Laughton, Robert. THE MOVEMENTS OF ADULT ATLANTIC SALMON (*SALMO SALAR* L.) IN THE RIVER SPEY AS DETERMINED BY RADIO TELEMETRY DURING 1988 AND 1989. *Scott. Fish. Res. Rep.* No. 50. 35p. 1991. FR 37(2)

92-002961 Leaniz Caprile, Carlos Garcia de. DISTRIBUTION, GROWTH, MOVEMENTS, AND HOMING BEHAVIOUR OF JUVENILE ATLANTIC SALMON AND BROWN TROUT IN THE GIRNOCK BURN, ABERDEENSHIRE. *Ph.D. dissertation, Univ. Aberdeen (United Kingdom)* 474p. 1990. From Diss. Abstr. Int. B Sci. Eng. 52(8):4021. 1992. Order No. BRDX94245. FR 37(2)
Salmo trutta and *S. salar* in Scotland.

92-002962 Lenarz, William H.; Ralph J. Larson and Stephen Ralston. DEPTH DISTRIBUTIONS OF LATE LARVAE AND PELAGIC JUVENILES OF SOME FISHES OF THE CALIFORNIA CURRENT. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 41-46. 1991. In English with Spanish summ. FR 37(2)
[NMFS, 3150 Paradise Dr., Tiburon, CA 94920] Data for 19 species.

92-002963 Markham, James L.; David L. Johnson and Raymond W. Petering. WHITE CRAPPIE SUMMER MOVEMENTS AND HABITAT USE IN DELAWARE RESERVOIR, OHIO. *N. Am. J. Fish. Manage.* 11(4):504-512. 1991. FR 37(2)
[Dep. Nat. Resour., Tidewater Admin.-Fish., Tawes State Off. Bldg.-C-2, Annapolis, MD 21401] *Pomoxis annularis.*

92-002964 Methven, David A. and John F. Piatt. SEASONAL ABUNDANCE AND VERTICAL DISTRIBUTION OF CAPELIN (*MALLOTUS VILLOSUS*) IN RELATION TO WATER TEMPERATURE AT A COASTAL SITE OFF EASTERN NEWFOUNDLAND. *J. Cons. Cons. Int. Explor. Mer* 48(2):219-228. 1991. FR 37(2)
[Ocean Sci. Cent., Memorial Univ. Newfoundland, St. John's, NF, Canada A1C 5S7]

92-002965 Morrissey, John Francis. ACTIVITY SPACE PARAMETERS, HOME RANGE, DIEL ACTIVITY RHYTHMS, AND HABITAT SELECTION OF JUVENILE LEMON SHARKS, *NEGAPRION BREVIROSTRIS* (POEY). *Ph.D. dissertation, Univ. Miami* 157p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4614. 1992. Order No. DA9205360. FR 37(2)

92-002966 O'Gorman, Robert; Edward L. Mills and Joe DeGisi. USE OF ZOOPLANKTON TO ASSESS THE MOVEMENT AND DISTRIBUTION OF ALEWIFE (*ALOSA PSEUDOHARENGUS*) IN SOUTH-CENTRAL LAKE ONTARIO IN SPRING. *Can. J. Fish. Aquat. Sci.* 48(11):2250-2257. 1991. In English with French summ. FR 37(2)
[U.S. Fish & Wildl. Serv., Oswego Biol. Stn., 17 Lake St., Oswego, NY 13126]

92-002967 Re, Pedro. TIDAL TRANSPORT AND RETENTION OF ANCHOVY EGGS AND LARVAE WITHIN MIRA ESTUARY (PORTUGAL). *Port. Zool.* 1(2):7-13. 1990. In English with Portuguese summ. FR 37(2)
[Dep. Zool. & Antropol., Fac. Cienc. C2, Univ. Lisboa, 1700 Lisbon, Portugal] *Engraulis encrasicholus.*

92-002968 Stables, T. B. and G. L. Thomas. ACOUSTIC MEASUREMENT OF TROUT DISTRIBUTIONS IN SPADA LAKE, WASHINGTON, USING STATIONARY TRANSDUCERS. *J. Fish Biol.* 40(2):191-203. 1992. FR 37(2)
[Canadian BioSonics, Ltd., P.O. Box 436, Sardis, BC, Canada V2R 1A7] *Oncorhynchus mykiss* and *O. clarki.*

92-002969 van der Spoel, S. and J. Bleeker. DISTRIBUTION OF MYCTOPHIDAE (PISCES, MYCTOPHIFORMES) DURING THE FOUR SEASONS IN THE MID NORTH ATLANTIC. *Bijdr. Dierkd.* 61(2):89-106. 1991. In English with French summ. FR 37(2)
[Inst. Taxonomic Zool., Univ. Amsterdam, P.O. Box 4766, 1009 AT Amsterdam, Netherlands]

FOODS/FEEDING

92-002970 Bello, Giambattista. ROLE OF CEPHALOPODS IN THE DIET OF THE SWORDFISH, *XIPHIAS GLADIUS*, FROM THE EASTERN MEDITERRANEAN SEA. *Bull. Mar. Sci.* 49(1-2):312-324. 1991. FR 37(2)
[Ist. Arion, C.P. 70042 Mola di Bari, Italy]

92-002971 Bialokoz, Witold. EVALUATION OF THE INTENSITY AND EFFICIENCY OF BLEAK *ALBURNUS ALBURNUS* (L.) FEEDING IN TAJTY LAKE, MASURIAN LAKELAND, POLAND. COMPARATIVE ANALYSIS OF METHODS. *Ekol. Pol.* 38(2):163-183. 1990. In English with Polish summ. FR 37(2)
[Inland Fish. Inst., Lake Fish. Stn., Rajska 2, 11-500 Gizycko, Poland]

92-002972 Brett, Michael T. *CHAOBORUS* AND FISH-MEDIATED INFLUENCES ON *DAPHNIA LONGISPINA* POPULATION STRUCTURE, DYNAMICS AND LIFE HISTORY STRATEGIES. *Oecologia (Heidelb.)* 89(1):69-77. 1992. FR 37(2)
[Div. Environ. Studies, Univ. Calif., Davis 95616]

92-002973 Campbell, R. N. B. FOOD OF AN INTRODUCED POPULATION OF PIKEPERCH, *STIZOSTEDION LUCIOPERCA* L., IN LAKE EGIRDIR, TURKEY. *Aquacult. Fish. Manage.* 23(1):71-85. 1992. FR 37(2)
[River Tweed Found., Farm Cottage, Drygrange by Melrose, Roxburghshire TD6 9DJ, Scotland]

92-002974 Czapla, Thomas E. DIETS AND PREY SELECTION OF PINFISH AND SOUTHERN FLOUNDER IN A *HALODULE WRIGHTII* SEAGRASS MEADOW. *Ph.D. dissertation, Tex. A&M Univ.* 105p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4627. 1992. Order No. DA9206483. FR 37(2)
Lagodon rhomboides and *Paralichthys lethostigma*.

92-002975 Davis, Bruce M. and Jeffrey W. Foltz. FOOD OF BLUEBACK HERRING AND THREADFIN SHAD IN JOCASSEE RESERVOIR, SOUTH CAROLINA. *Trans. Am. Fish. Soc.* 120(5):605-613. 1991. FR 37(2)
[Natl. Fish. Res. Cent.-Great Lakes, U.S. Fish & Wildl. Serv., 1451 Green Rd., Ann Arbor, MI 48105] *Dorosoma petenense* and *Alosa aestivalis*.

92-002976 Easton, Robert S. FEEDING ECOLOGY OF AGE-0 SMALLMOUTH BASS IN THE NEW RIVER, WEST VIRGINIA. *M.S. thesis, Va. Polytech. Inst. & State Univ.* 99p. 1992. FR 37(2)
Micropterus dolomieu.

92-002977 El Gamal, A. A. PREDATION BY NILE PERCH *LATES NILOTICUS* (L.) ON *OREOCHROMIS NILOTICUS* (L.), *CYPRINUS CARPIO* (L.), *MUGIL* SP. AND ITS ROLE IN CONTROLLING TILAPIA RECRUITMENT IN EGYPT. *J. Fish Biol.* 40(3):351-358. 1992. FR 37(2)
[Madinet El Zahraa, Salam Bldg., Entrance 5, Flat 14, Helmiet el Zaton, Cairo, Egypt] *M. cephalus* and *M. capito*.

92-002978 Fausch, Kurt D. LIFE AS A TROUT: PREDATOR. *Trout* 33(1):62-74. 1992. FR 37(2)

92-002979 Goshorn, D. M. and C. E. Epifanio. DIET OF LARVAL WEAKFISH AND PREY ABUNDANCE IN DELAWARE BAY. *Trans. Am. Fish. Soc.* 120(6):684-692. 1991. FR 37(2)
[Univ. Del., Coll. Mar. Studies, 700 Pilottown Rd., Lewes 19958] *Cynoscion regalis*.

92-002980 Goshorn, D. M. and C. E. Epifanio. DEVELOPMENT, SURVIVAL, AND GROWTH OF LARVAL WEAKFISH AT DIFFERENT PREY ABUNDANCES. *Trans. Am. Fish. Soc.* 120(6):693-700. 1991. FR 37(2)
[Dep. Nat. Resour., Tidewater Admin. C-2, 580 Taylor Ave., Annapolis, MD 21401] *Cynoscion regalis* in Delaware.

92-002981 Grover, Jill J. TROPHIC RELATIONSHIP OF AGE-0 AND AGE-1 WALLEYE POLLOCK *THERAGRA CHALCOGRAMMA* COLLECTED TOGETHER IN THE EASTERN BERING SEA. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):719-722. 1991. FR 37(2)
[Coll. Oceanogr., Oreg. State Univ., Hatfield Mar. Sci. Cent., Newport 97365]

92-002982 Hart, P. J. B. and A. B. Gill. CONSTRAINTS ON PREY SIZE SELECTION BY THE THREE-SPINED STICKLEBACK: ENERGY REQUIREMENTS AND THE CAPACITY AND FULLNESS OF THE GUT. *J. Fish Biol.* 40(2):205-218. 1992. FR 37(2)
[Dep. Zool., Univ. Leicester, Leicester LE1 7RH, England] *Gasterosteus aculeatus*.

92-002983 Hayward, Robert S.; F. Joseph Margraf, Jr.; Donna L. Parrish and Bruce Vondracek. LOW-COST FIELD ESTIMATION OF YELLOW PERCH DAILY RATION. *Trans. Am. Fish. Soc.* 120(5):589-604. 1991. FR 37(2)
[School Nat. Resour., 112 Stephens Hall, Univ. Mo., Columbia 65211] *Perca flavescens*.

92-002984 Henriques, D. PREY CAPTURE AND BUCCAL CAVITY PRESSURE IN THE KELP GREENLING: FIXED OR FLEXIBLE RESPONSE TO VARYING PREY TYPE? *Am. Zool.* 31(5):18A. 1991. Abstract only. FR 37(2)
[Harvard Univ., Cambridge, MA] *Hexagrammos decagrammus*.

FOODS/FEEDING (Continued)

92-002985 Hislop, J. R. G.; A. P. Robb; M. A. Bell and D. W. Armstrong. THE DIET AND FOOD CONSUMPTION OF WHITING (*MERLANGIUS MERLANGUS*) IN THE NORTH SEA. *J. Cons. Cons Int. Explor. Mer* 48(2):139-156. 1991. FR 37(2)
[SOAFD Mar. Lab., P.O. Box 101, victoria Rd., Aberdeen, Scotland]

92-002986 Hunt von Herbing, I.; T. Miyake; R. G. Boutilier and B. K. Hall. THE COUPLING OF FEEDING AND RESPIRATION IN DEVELOPING ATLANTIC COD *GADUS MORHUA*; IMPLICATIONS FOR FORAGING AND SURVIVAL. *Am. Zool.* 31(5):35A. 1991. Abstract only. FR 37(2)
[Dalhousie Univ., Halifax, NS, Canada]

92-002987 Kaiser, Michel J.; Robin N. Gibson and Roger N. Hughes. THE EFFECT OF PREY TYPE ON THE PREDATORY BEHAVIOUR OF THE FIFTEEN-SPINED STICKLEBACK, *SPINACHIA SPINACHIA* (L.). *Anim. Behav.* 43(1):147-156. 1992. FR 37(2)
[Functional & Evol. Biol. Group, School Biol. Sci., Univ. Wales, Bangor Gwynedd LL57 2UW, Wales]

92-002988 Kohler, C. C.; D. R. Tindall; P. C. Phillips and S. Kohler. OBSERVATIONS OF THE CIGUATERA FOOD CHAIN AT ST. JOHN, USVI. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 28. 1988. English and Spanish abstract only. FR 37(2)
[South. Ill. Univ., Carbondale] *Acanthurus coeruleus, A. bahianus, A. chirurgus, Scarus croicensis, Pomacentrus leucostictus, Thalassoma bifasciatum,* and *Halichoeres bivittatus.*

92-002989 Konchina, Yu. V. TROPHIC STATUS OF THE PERUVIAN ANCHOVY AND SARDINE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):59-72. 1991. FR 37(2)
[All-Union Res. Inst., Mar. Fish. & Oceanogr. (UNIRO), Moscow, USSR] *Engraulis ringens* and *Sardinops sagax sagax.*

92-002990 Krogdahl, Ashild and Trygve Berg-Lea. EFFECTS OF A SOYBEAN PROTEINASE INHIBITOR ON TRYPSIN ACTIVITY AND DIGESTIBILITIES OF AMINO ACIDS IN RAINBOW TROUT MEASURED IN THE PROXIMAL AND DISTAL INTESTINE AND IN FAECES. *Aquaculture* 100(1-3):232-233. 1992. Abstract only. FR 37(2)
[AKVAFORSK, P.O. Box 10, N-1432, As-NLH, Norway] *Oncorhynchus mykiss.*

92-002991 Labinger, Zev; Gadi Katzir and Yoav Benjamini. PREY SIZE CHOICE BY CAPTIVE PIED KINGFISHERS, *CERYLE RUDIS* L. *Anim. Behav.* 42(6):969-975. 1991. FR 37(2)
[Dep. Zool., Tel Aviv Univ., Tel Aviv 69978, Israel] *Tilapia* and *Gambusia affinis.*

92-002992 Magalhaes, M. F. FEEDING ECOLOGY OF THE IBERIAN CYPRINID *BARBUS BOCAGEI* STEINDACHNER, 1865 IN A LOWLAND RIVER. *J. Fish Biol.* 40(1):123-133. 1992. FR 37(2)
[Dep. Zool. & Antropol., Fac. Cienc. Lisboa, Bloco C-2, 3É Piso, Campo Grande, 1700 Lisbon, Portugal]

92-002993 Malmquist, H. J.; S. S. Snorrason; S. Skulason; B. Jonsson; O. T. Sandlund and P. M. Jonasson. DIET DIFFERENTIATION IN POLYMORPHIC ARCTIC CHARR IN THINGVALLAVATN, ICELAND. *J. Anim. Ecol.* 61(1):21-35. 1992. FR 37(2)
[Inst. Biol., Univ. Iceland, Grensasvegur 12, 108 Reykjavik, Iceland] *Salvelinus alpinus.*

92-002994 McKenna, James E., Jr. TROPHIC RELATIONSHIPS WITHIN THE ANTARCTIC DEMERSAL FISH COMMUNITY OF SOUTH GEORGIA ISLAND. *U.S. Natl. Mar. Fish. Serv. Fish Bull.* 89(4):643-654. 1991. FR 37(2)
[Mar. Res. Inst., 100 8th Ave. SE, St. Petersburg, FL 33701] Data for 15 species.

92-002995 Metcalfe, Neil B. and John E. Thorpe. ANOREXIA AND DEFENDED ENERGY LEVELS IN OVER-WINTERING JUVENILE SALMON. *J. Anim. Ecol.* 61(1):175-181. 1992. FR 37(2)
[Fish Behav. & Ecol. Group, Dep. Zool., Glasgow Univ., Glasgow G12 8QQ, Scotland] *Salmo salar* in Scotland.

92-002996 Moreno-Amich, R. FEEDING HABITS OF RED GURNARD, *ASPITRIGLA CUCULUS* (L. 1758) (SCORPAENIFORMES, TRIGLIDAE), ALONG THE CATALAN COAST (NORTHWESTERN MEDITERRANEAN). *Hydrobiologia* 228(3):175-184. 1992. FR 37(2)
[Lab. Ichthyol. & Inst. Aquat. Ecol., Estudi Gen. Girona, Univ. Autonoma Barcelona, 17071 Girona, Spain]

92-002997 Naumovski, Mirce. [ON THE FEEDING OF SILVER CARP (*HYPOPHTHALMICHTHYS MOLITRIX* VAL.) UNDER POND CONDITIONS.] *Ichthyos* No. 10. p. 25-31. 1991. In Serbo-Croatian with English summ. FR 37(2)

92-002998 O'Reilly, J. C. and S. M. Deban. THE EVOLUTION OF AQUATIC PREY CAPTURE IN AMPHIBIANS: PHYLOGENETIC CONSTRAINTS AND ADAPTATIONS. *Am. Zool.* 31(5):17A. 1991. Abstract only. FR 37(2)
[North. Ariz. Univ., Flagstaff] *Protopterus.*

92-002999 Parrish, J. D. and J. E. Norris. PISCIVOROUS INTERACTIONS AMONG REEF FISHES. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 34. 1988. English and Spanish abstract only. FR 37(2)
[Coop. Fish. Res. Unit, Univ. Hawaii, Honolulu]

FOODS/FEEDING (Continued)

92-003000 Paul, A. J.; K. O. Coyle and L. Haldorson. INTERANNUAL VARIATIONS IN COPEPOD NAUPLII PREY OF LARVAL FISH IN AN ALASKAN BAY. *J. Cons. Cons. Int. Explor. Mer* 48(2):157-165. 1991. FR 37(2)

[Univ. Alaska, Inst. Mar. Sci. Seward Mar. Cent., P.O. Box 730, Seward 99664] *Hippoglossoides elassodon* and *Theragra chalcogramma.*

92-003001 Penttinen, Olli-Pekka and Ismo J. Holopainen. SEASONAL FEEDING ACTIVITY AND ONTOGENETIC DIETARY SHIFTS IN CRUCIAN CARP, *CARASSIUS CARASSIUS. Environ. Biol. Fishes* 33(1-2):215-221. 1992. FR 37(2)

[Dep. Biol., Univ. Joensuu, P.O. Box 111, SF-80101 Joensuu, Finland]

92-003002 Pierce, G. J.; P. R. Boyle and J. S. W. Diack. DIGESTIVE TRACT CONTENTS OF SEALS IN SCOTTISH WATERS: COMPARISON OF SAMPLES FROM SALMON NETS AND ELSEWHERE. *J. Zool. (Lond.)* 225(4):670-676. 1991. FR 37(2)

[Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, Scotland] *Salmo salar* and *Gadus morhua.*

92-003003 Present, T. M. C. and D. O. Conover. PHYSIOLOGICAL BASIS OF LATITUDINAL GROWTH DIFFERENCES IN *MENIDIA MENIDIA*: VARIATION IN CONSUMPTION OR EFFICIENCY? *Funct. Ecol.* 6(1):23-31. 1992. FR 37(2)

[Conover: Mar. Sci. Res. Cent., SUNY, Stony Brook, NY 11794-5000]

92-003004 Robert, Rene and Rene Parra. [EXPERIMENTAL STUDY OF PREDATION BY THE GILTHEAD BREAM, *SPARUS AURATA* AND THE GRAY TRIGGERFISH, *BALISTES CAPRISCUS* ON THE MANILA CLAM *RUDITAPES PHILIPPINARUM.*] *Aquat. Living Resour.* 4(3):181-189. 1991. In French with English summ. FR 37(2)

[IFREMER, quai commandant Silhouette, 33120 Arcachon, France]

92-003005 Smith, R. L.; J. P. Salini and S. J. M. Blaber. FOOD INTAKE AND GROWTH IN THE BLUE-SPOTTED TREVALLY, *CARANX BUCCULENTUS* ALLEYNE AND MACLEAY 1877, WITH REFERENCE TO PREDATION ON PENAEID PRAWNS. *J. Fish Biol.* 40(3):315-324. 1992. FR 37(2)

[Inst. Mar. Sci. & Dep. Biol. & Wildl., Univ. Alaska, Fairbanks 99775]

92-003006 Strange, Rex Meade. DIET SELECTIVITY IN THE JOHNNY DARTER, *ETHEOSTOMA NIGRUM,* IN STINKING FORK, INDIANA. *J. Freshwater Ecol.* 6(4):377-381. 1991. FR 37(2)

[Dep. Biol., Univ. South. Indiana, Evansville 47712]

92-003007 Swink, William D. HOST-SIZE SELECTION BY PARASITIC SEA LAMPREYS. *Trans. Am. Fish. Soc.* 120(5):637-643. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent., Hammond Bay Biol. Stn., 11188 Ray Rd., Millersburg, MI 49759] *Petromyzon marinus* and *Salvelinus namaycush.*

92-003008 Tanasichuk, R. W.; D. M. Ware; W. Shaw and G. A. McFarlane. VARIATIONS IN DIET, DAILY RATION, AND FEEDING PERIODICITY OF PACIFIC HAKE (*MERLUCCIUS PRODUCTUS*) AND SPINY DOGFISH (*SQUALUS ACANTHIAS*) OFF THE LOWER WEST COAST OF VANCOUVER ISLAND. *Can. J. Fish. Aquat. Sci.* 48(11):2118-2128. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6]

92-003009 Tokranov, A. M. and A. B. Vinnikov. DIET OF THE PACIFIC COD, *GADUS MORHUA MACROCEPHALUS,* AND ITS POSITION IN THE FOOD CHAIN IN KAMCHATKAN COASTAL WATERS. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):84-98. 1991. FR 37(2)

[Kamchatka Div. Pac. Sci. Res. Inst. Fish. & Oceanogr., Petropavlovsk-Kamchatskiy, USSR]

92-003010 Tonn, W. M.; C. A. Paszkowski and I. J. Holopainen. SELECTIVE PISCIVORY BY PERCH: EFFECTS OF PREDATOR SIZE, PREY SIZE, AND PREY SPECIES. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2406-2411. 1989. FR 37(2)

[Dep. Zool., Univ. Alberta, Edmonton, AB, Canada T6G 2E9] *Perca fluviatilis, Carassius carassius,* and *Rutilus rutilus.*

92-003011 Ward, F. J. and B. R. McCulloch. RELATIONSHIP BETWEEN MOUTH GAPE OF JUVENILE WALLEYE *(STIZOSTEDION VITREUM VITREUM)* AND PREY SIZE. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2362-2364. 1989. FR 37(2)

[Dep. Zool., Univ. Manitoba, Winnipeg, MB, Canada R3T 2N2]

92-003012 Weeks, Stephen C.; Oscar E. Gaggiotti; Russell A. Schenck; Kurt P. Spindler and Robert C. Vrijenhoek. FEEDING BEHAVIOR IN SEXUAL AND CLONAL STRAINS OF *POECILIOPSIS. Behav. Ecol. Sociobiol.* 30(1):1-6. 1992. FR37(2)

[Vrijenhoek: Cent. Theoretical & Appl. Genet., Rutgers Univ., P.O. Box 231, New Brunswick, NJ 08903] *P. lucida* and *P. monacha.*

FOODS/FEEDING (Continued)

92-003013 Wellborn, Gary A. and James V. Robinson. THE INFLUENCE OF FISH PREDATION IN AN EXPERIENCED PREY COMMUNITY. *Can. J. Zool.* 69(10):2515-2522. 1991. In English with French summ. FR 37(2)

[Dep. Biol., Univ. Mich., Ann Arbor 48109] *Lepomis macrochirus* in Texas.

92-003014 Wing, John F. and Donald J. Glazier. LONGER-TERM FAUNAL CYCLES IN THE EASTERN CANADIAN ARCTIC. *Ohio J. Sci.* 92(2):57. 1992. Abstract only. FR 37(2)

[Wittenberg Univ., P.O. Box 720, Springfield, OH 45501] *Gadus morhua.*

92-003015 Wu, Lin and D. A. Culver. AGE-0 YELLOW PERCH *(PERCA FLAVESCENS)* DIETARY ONTOGENY IN THE WESTERN BASIN OF LAKE ERIE: EFFECT OF MIDSUMMER DECLINE IN ZOOPLANKTON POPULATIONS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2366-2370. 1989. FR 37(2)

[Dep. Zool., Ohio State Univ., 1735 Neil Ave., Columbus 43210-1293]

92-003016 Wulff, J. L. FISH PREDATION ON CRYPTIC SPONGES OF CARIBBEAN CORAL REEFS. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 24. 1988. English and Spanish abstract only. FR 37(2)

[Yale Univ., New Haven, CT] *Sparisoma.*

AGE AND GROWTH

92-003017 Andreyev, Victor. THE CONTENT OF MICROELEMENTS IN THE *ACIPENSER STELLATUS* PALLAS EARLY DEVELOPMENT STAGES UNDER ARTIFICIAL AND NATURAL REPRODUCTION CONDITIONS. *Acta Ichthyol. Piscatoria* 21(1):65-72. 1991. In English with Polish summ. FR 37(2)

[Astrakhan Tech. Inst. Fish., Astrakhan, Tatistscheva 16, USSR]

92-003018 Arruda, Luis M.; Jose N. Azevedo and Ana I. Neto. AGE AND GROWTH OF THE GREY MULLET (PISCES, *MUGILIDAE*) IN RIA DE AVEIRO (PORTUGAL). *Sci. Mar.* 55(3):497-504. 1991. In English with Spanish summ. FR 37(2)

[Fac. Cienc. Univ. Lisboa, Rua Escola Politecnica 58, 1294 Lisbon Codex, Portugal] *M. cephalus, Liza aurata, L. ramada,* and *Chelon labrosus.*

92-003019 Bugayev, V. F. and V. A. Dubynin. SEASONAL GROWTH RHYTHMS AND RATE OF CIRCULI FORMATION ON THE SCALES OF JUVENILE SOCKEYE SALMON, *ONCORHYNCHUS NERKA,* DURING THE FRESHWATER PERIOD OF LIFE IN LAKES AZABACH'YE AND KURIL'SKOYE OF KAMCHATKA. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):39-51. 1991. FR 37(2)

[Kamchatka Branch, Pac. Fish. & Oceanogr. Res. Inst., Petropavlovsk-Kamchatskiy, USSR]

92-003020 Degani, Gad and Dan Levanon. THE RELATIONSHIP BETWEEN GROWTH OF CARP (*CYPRINUS CARPIO* L.), TILAPIA (*OREOCHROMIS AUREA* STEINDACHNER) AND SILVER CARP (*CTENOPHARYNGODON IDELLA* VAL.) AND WATER QUALITY RESERVOIRS IN NORTHERN ISRAEL. *J. Aquaricult. Aquat. Sci.* 6(1):16-21. 1991. FR 37(2)

[Migal-Galilee Technol. Cent., Kiryat Shmonah 1200, Israel]

92-003021 Domanico, Alejandro A. and Carlos A. Guerrero. [OTOLITH USE IN DETERMINING AGE AND GROWTH OF *PERCICHTHYS TRUCHA* (VALENCIENNES, 1850) (OSTEICHTHYHES: PERCICHTHYDAE).] *Medio Ambiente* 11(1):42-52. 1990. In Spanish with English summ. FR 37(2)

[Becario Perfeccionamiento C.I.C., Inst. Nac. Invest. & Desarrollo Pesq., Avda. Santa Fe 1548 7mo. Piso (1060), Buenos Aires, Argentina]

92-003022 Gadomski, Dena M. and Steven M. Caddell. EFFECTS OF TEMPERATURE ON EARLY-LIFE-HISTORY STAGES OF CALIFORNIA HALIBUT *PARALICHTHYS CALIFORNICUS. U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):567-576. 1991. FR 37(2)

[Natl. Fish. Res. Cent., Columbia River Field Stn., U.S. Fish & Wildl. Serv., Star Rt., Cook, WA 98605]

92-003023 Gamboa, David Aurioles. OTOLITH SIZE VERSUS WEIGHT AND BODY-LENGTH RELATIONSHIPS FOR ELEVEN FISH SPECIES OF BAJA CALIFORNIA, MEXICO. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):701-706. 1991. FR 37(2)

[Dep. Recursos Mar., Div. Biol. Mar. Cent. Invest. Biol. Baja California Sur, Apdo. Postal 128, La Paz, Baja California Sur, Mexico] *Hippoglossina stomata, Lepophidium prorates, Ophidion scrippsae, Serranus aequidens, Prionotus stephanophrys, Merluccius angustimanus, Calamus brachysomus, Citharichthys xanthostigma, Porichthys myriaster, Synodus lucioceps,* and *S. jenkinsi.*

92-003024 Gipson, Robert D. and Wayne A. Hubert. FACTORS INFLUENCING THE BODY CONDITION OF RAINBOW TROUT IN SMALL WYOMING RESERVOIRS. *J. Freshwater Ecol.* 6(3):327-334. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Coop. Fish & Wildl. Res. Unit, Univ. Wyo., Laramie 82071] *Salmo trutta, Oncorhynchus mykiss, O. clarki, Salvelinus fontinalis, Catostomus commersoni, C. catostomus,* and *Perca flavescens.*

AGE AND GROWTH (Continued)

92-003025 Hales, L. S., Jr.; E. J. Reitz and E. E. Niciu. HISTORICAL CHANGES IN AGE & GROWTH OF TWO ESTUARINE FISHES. *Am. Zool.* 31(5):93A. 1991. Abstract only. FR 37(2)
[Univ. Ga., Athens] *Micropogonias undulatus* in Georgia and Florida.

92-003026 Hall, D. L. AGE VALIDATION AND AGING METHODS FOR STUNTED BROOK TROUT. *Trans. Am. Fish. Soc.* 120(5):644-649. 1991. FR 37(2)
[Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6] *Salvelinus fontinalis* in California.

92-003027 Hammers, Brad E. and L. Esteban Miranda. COMPARISON OF METHODS FOR ESTIMATING AGE, GROWTH, AND RELATED POPULATION CHARACTERISTICS OF WHITE CRAPPIES. *N. Am. J. Fish. Manage.* 11(4):492-498. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Coop. Fish & Wildl. Res. Unit, P.O. Drawer BX, Mississippi State, MS 39762] *Pomoxis annularis* in Mississippi.

92-003028 Jellyman, Don. HOW OLD DO BROWN TROUT GET? *Freshwater Catch* No. 47. p. 14. 1991. FR 37(2)
[MAF Fish., Freshwater Cent., Christchurch, New Zealand] *Salmo trutta* in New Zealand.

92-003029 Johnsson, Jorgen I. and Craig Clarke. A GENETIC STUDY OF SEASONAL GROWTH PATTERNS IN FRESH AND SEA WATER OF JUVENILE STEELHEAD TROUT AND DOMESTICATED RAINBOW TROUT CROSSES. *Aquaculture* 100(1-3):100. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Goteborg, P.O. Box 250 59, S-400 31 Goteborg, Sweden] *Oncorhynchus mykiss.*

92-003030 Kaminski, Michael T.; Edward J. Peters and Richard S. Holland. PECTORAL-SPINE EMBEDDING TO FACILITATE SECTIONING FOR AGE ANALYSIS OF YOUNG CHANNEL CATFISH (*ICTALURUS PUNCTATUS*). *Trans. Nebr. Acad. Sci.* Vol. 18. p. 99-100. 1991. FR 37(2)
[Dep. For., Fish. & Wildl., Univ. Nebr., Lincoln 68583-0814]

92-003031 Kneib, R. T. and J. H. Parker. GROSS CONVERSION EFFICIENCIES OF MUMMICHOG AND SPOTFIN KILLIFISH LARVAE FROM A GEORGIA SALT MARSH. *Trans. Am. Fish. Soc.* 120(6):803-809. 1991. FR 37(2)
[Univ. Ga., Mar. Inst., Sapelo Island 31327] *Fundulus heteroclitus* and *F. luciae.*

92-003032 Laidig, Thomas E.; Stephen Ralston and James R. Bence. DYNAMICS OF GROWTH IN THE EARLY LIFE HISTORY OF SHORTBELLY ROCKFISH *SEBASTES JORDANI. U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):611-621. 1991. FR 37(2)
[Tiburon Lab., Southwest Fish. Sci. Cent., NMFS, NOAA, 3150 Paradise Dr., Tiburon, CA 94920]

92-003033 Lorson, Richard D. and Martin T. Marcinko. AGE AND GROWTH STATISTICS COMPARING BROWN TROUT SCALES AND OTOLITHS. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 89-93. 1990. FR 37(2)
[Fish Comm., 450 Robinson Ln., Bellefonte, PA 16823] *Salmo trutta.*

92-003034 Meffe, Gary K. PLASTICITY OF LIFE-HISTORY CHARACTERS IN EASTERN MOSQUITOFISH (*GAMBUSIA HOLBROOKI*: POECILIIDAE) IN RESPONSE TO THERMAL STRESS. *Copeia* 1992(1):94-102. 1992. FR 37(2)
[Univ. Ga. Savannah River Ecol. Lab., Drawer E, Aiken, SC 29801]

92-003035 Mytilineou, Chryssi and Costas Papaconstantinou. AGE AND GROWTH OF *SPICARA FLEXUOSA* (RAFINESQUE, 1810) (PISCES, CENTRACANTHIDAE) IN THE PATRAIKOS GULF (GREECE). *Sci. Mar.* 55(3):483-490. 1991. In English with Spanish summ. FR 37(2)
[Natl. Cent. Mar. Res., 16604 Hellinikon, Greece]

92-003036 Nizovtsev, G. P. GROWTH PATTERNS OF GREENLAND HALIBUT *(REINHARDTIUS HIPPOGLOSSOIDES)* IN THE NORTHEAST ATLANTIC. *Northwest Atl. Fish. Organ. Sci. Counc. Stud.* No. 15. p. 35-41. 1991. FR 37(2)
[Polar Res. Inst. Mar. Fish. & Oceanogr. (PINRO), 6 Knipovich St., Murmansk 183763, USSR]

92-003037 Ponce Diaz, German; Sofia Ortega Garcia and Pedro G. Gonzalez Ramirez. [ANALYSIS OF SIZES AND WEIGHT-LENGTH RELATION OF THE STRIPED MARLIN, *TETRAPTURUS AUDAX* (PHILIPPI, 1887) IN BAJA CALIFORNIA SUR, MEXICO.] *Cienc. Mar.* 17(4):69-82. 1991. In Spanish with English summ. FR 37(2)
[Cent. Interdiscip. Cienc. Mar.-IPN, Apdo. Postal 592, La Paz, Baja California Sur, Mexico]

92-003038 Prokes, Miroslav. GROWTH OF THE FRY OF PIKE-PERCH, *STIZOSTEDION LUCIOPERCA*, IN THE MUSOV RESERVOIR. *Folia Zool.* 39(4):361-374. 1990. FR 37(2)
[Inst. Syst. & Ecol. Biol., Czechoslavak Acad. Sci., Kvetna 8, 603 65 Brno, Czechoslovakia]

92-003039 Prokes, Miroslav and Armando Perez Martinez. GROWTH OF *CICHLASOMA TETRACANTHUM* O+. *Folia Zool.* 40(1):85-95. 1991. FR 37(2)
[Inst. Syst. & Ecol. Biol., Czechoslovak Acad. Sci., Kvetna 8, 603 65 Brno, Czechoslovakia]

AGE AND GROWTH (Continued)

92-003040 Pusch, Martin and Reiner Eckmann. GROWTH PATTERNS OF WHITEFISH (*COREGONUS LAVARETUS* L.) IN LAKE CONSTANCE DERIVED FROM OTOLITH MICROSTRUCTURES. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2461-2464. 1989. FR 37(2)

[Limnol. Inst., Univ. Constance, P.O. Box 5560, D-7750 Constance, Germany]

92-003041 Stergiou, K. I.; P. Economidis and A. Sinis. AGE, GROWTH AND MORTALITY OF RED BANDFISH, *CEPOLA MACROPHTHALMA* (L.), IN THE WESTERN AEGEAN SEA (GREECE). *J. Fish Biol.* 40(3):395-418. 1992. FR 37(2)

[Natl. Cent. Mar. Res., Agios Kosmas, Hellinikonn, Athens 16604, Greece]

92-003042 Sumpter, John P. CONTROL OF GROWTH OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquaculture* 100(1-3):299-320. 1992. FR 37(2)

[Dep. Biol. & Biochem., Brunel Univ., Uxbridge, Middlesex UB8 3PH, England]

92-003043 Sweatman, James J. and Christopher C. Kohler. VALIDATION OF DAILY OTOLITH INCREMENTS FOR YOUNG-OF-THE-YEAR WHITE CRAPPIES. *N. Am. J. Fish. Manage.* 11(4):499-503. 1991. FR 37(2)

[Fish. Res. Lab. & Dep. Zool., South. Ill. Univ., Carbondale 62901] *Pomoxis annularis.*

92-003044 Tsukamoto, Katsumi. [AGE AND GROWTH OF AYU LARVAE *PLECOGLOSSUS ALTIVELIS* COLLECTED IN THE NAGARA, KISO AND TONE RIVER DURING THE DOWNSTREAM MIGRATION.] *Nippon Suisan Gakkaishi* 57(11):2013-2022. 1991. In Japanese with English summ. FR 37(2)

[Ocean Res. Inst., Univ. Tokyo, Minamidai, Nakano, Tokyo 164, Japan]

92-003045 Tzeng, W.-N. and S.-Y. Yu. EFFECTS OF STARVATION ON THE FORMATION OF DAILY GROWTH INCREMENTS IN THE OTOLITHS OF MILKFISH, *CHANOS CHANOS* (FORSSKAL), LARVAE. *J. Fish Biol.* 40(1):39-48. 1992. FR 37(2)

[Dep. Zool., Coll. Sci., Natl. Taiwan Univ., Taipei, Taiwan 10764]

92-003046 Velikanov, A. Va. ANNUAL ZONES AND FORMATION OF OTOLITH STRUCTURE IN PACIFIC CAPELIN, *MALLOTUS VILLOSUS SOCIALIS. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):29-38. 1991. FR 37(2)

[Sakhalin Branch, Pac. Fish. & Oceanogr. Res. Inst., Yuzhno-Sakhalinsk, USSR]

92-003047 Vollestad, Leif Asbjorn. GEOGRAPHIC VARIATION IN AGE AND LENGTH AT METAMORPHOSIS OF MATURING EUROPEAN EEL: ENVIRONMENTAL EFFECTS AND PHENOTYPIC PLASTICITY. *J. Anim. Ecol.* 61(1):41-48. 1992. FR 37(2)

[Dep. Biol., Div. Zool., Univ. Oslo, P.O. Box 1050 Blindern, 0316 Oslo 3, Norway] *Anguilla anguilla* in Europe and Africa.

GEOGRAPHICAL DISTRIBUTION, FISH SURVEYS, ETC.

92-003048 Ahnelt, Harald and Benigno Elvira. [A COLLECTION OF MARINE AND FRESHWATER FISHES OF THE AUSTRIAN ADRIA-DEEPSEA-EXPEDITION OF 1894.] *Ann. Naturhist. Mus. Wien Ser. B Bot. Zool.* Vol. 92. p. 1-13. 1991. In German with English summ. FR 37(2)

[Zool. Abteilung, Naturhist. Mus. Wien, Postfach 417, A-1014 Vienna, Austria] *Zebrus zebrus* and *Clinitrachus argentatus* in Albania.

92-003049 Ahnelt, Harald. SOME RARE FISHES FROM THE WESTERN MEDITERRANEAN SEA. *Ann. Naturhist. Mus. Wien Ser. B Bot. Zool.* Vol. 92 p. 49-58. 1991. In English with German summ. FR 37(2)

[Inst. Zool., Univ. Wien, Althanstr. 14, A-1090 Vienna, Austria] *Chromogobius quadrivittatus, C. zebratus, Pomatoschistus microps, Nerophis maculatus, Zebrus zebrus, Tripterygion melanurus,* and *T. delaisi.*

92-003050 Gago, F. Javier and Robert J. Lavenberg. SYSTEMATICS OF THE LANTERNFISH GENUS *CENTROBRANCHUS* (PISCES: MYCTOPHIDAE). *Copeia* 1992(1):154-161. 1992. FR 37(2)

[Dep. Biol. Sci., University Park, Univ. South. Calif., Los Angeles 90089-0371] *C. nigroocellatus* and *C. andreae.*

92-003051 Golani, D. *RHABDOSARGUS HAFFARA* (FORSSKAL, 1775) AND *SPHYRAENA FLAVICAUDA* RUPPELL, 1833 - NEW RED SEA IMMIGRANTS IN THE MEDITERRANEAN. *J. Fish Biol.* 40(1):139-140. 1992. FR 37(2)

[Dep. Zool., Hebrew Univ., 91904 Jerusalem, Israel]

92-003052 Gordon, J. D. M. and O. A. Bergstad. SPECIES COMPOSITION OF DEMERSAL FISH IN THE ROCKALL TROUGH, NORTH-EASTERN ATLANTIC, AS DETERMINED BY DIFFERENT TRAWLS. *J. Mar. Biol. Assoc. U.K.* 72(1):213-230. 1992. FR 37(2)

[Scottish Mar. Biol. Assoc., Dunstaffnage Mar. Lab., P.O. Box 3, Oban, Argyll, PA34 4AD, Scotland] Data for 66 species.

GEOGRAPHICAL DISTRIBUTION, FISH SURVEYS, ETC. (Continued)

92-003053 Harshbarger, Thomas J. RELATIONSHIPS BETWEEN PHYSICAL HABITAT FACTORS AND THE DISTRIBUTION OF WILD TROUT IN NORTH CAROLINA STREAMS. *Trout Comm. South Div. Am. Fish. Soc.* p. 65. 1990. Abstract only. FR 37(2)
[12 Rice Cove Rd., Weaverville, NC 28787] *Salvelinus fontinalis, Salmo trutta, and Oncorhynchus mykiss.*

92-003054 Hutchins, J. B. DISPERSAL OF TROPICAL FISHES TO TEMPERATE SEAS IN THE SOUTHERN HEMISPHERE. *J. R. Soc. West. Aust.* 74(1):79-84. 1991. FR 37(2)
[Dep. Aquat. Vertebr., Western Australia Mus., Perth, W.A. 6000, Australia]

92-003055 Itzkowitz, M.; M. Haley; C. Otis and D. Evers. A RECONNAISSANCE OF THE DEEPER JAMAICAN CORAL REEF FISH COMMUNITIES. *Northeast Gulf Sci.* 12(1):25-34. 1991. FR 37(2)
[Biol. Dep., Lehigh Univ., Bethlehem, PA 18015]

92-003056 Jurvelius, Juha. DISTRIBUTION AND DENSITY OF PELAGIC FISH STOCKS, ESPECIALLY VENDACE (*COREGONUS ALBULA* (L.)), MONITORED BY HYDROACOUSTICS IN SHALLOW AND DEEP SOUTHERN BOREAL LAKES. *Finn. Fish. Res.* Vol. 12. p. 45-63. 1991. FR 37(2)
[Finnish Game & Fish. Res. Inst., Enonkoski State Aquacult. & Res. Stn., SF-58175 Enonkoski, Finland]

92-003057 Lemmons, Roger P.; Loren G. Hill and John Wells. EXTENSION OF RANGES INTO KIOWA COUNTY, OKLAHOMA, FOR THE DUSKY DARTER *(PERCINA SCIERA)*AND THE FRECKLED MADTOM *(NOTURUS NOCTURNUS). Proc. Okla. Acad. Sci.* Vol. 71. p. 47-48. 1991. FR 37(2)
[Dep. Zool., Univ. Okla., Norman 73019]

92-003058 Luk'yanenok, M. P. ON THE SPECIES STRUCTURE OF THE MESOPELAGIC ICHTHYOCENE IN THE SIERRA LEONE BASIN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):59-66. 1991. FR 37(2)
[West. Fish. Exploration Admin., Kaliningrad, USSR] Data for 22 species.

92-003059 Martin, J. H. and T. L. King. OCCURRENCE OF FAT SNOOK (*CENTROPOMUS PARALLELUS*) IN TEXAS: EVIDENCE FOR A RANGE EXTENSION. *Contrib. Mar. Sci.* No. 32. p. 123-126. 1991. FR 37(2)
[Parks & Wildl. Dep., P.O. Box 181078, Corpus Christi, TX 78480]

92-003060 Parin, N. V. FISH FAUNA OF THE NAZCA AND SALA Y GOMEZ SUBMARINE RIDGES, THE EASTERNMOST OUTPOST OF THE INDO-WEST PACIFIC ZOOGEOGRAPHIC REGION. *Bull. Mar. Sci.* 49(3):671-683. 1991. FR 37(2)
[P. P. Shirshov Inst. Oceanol., Acad. Sci., Moscow 117218, USSR]

92-003061 Pietsch, Theodore W.; David B. Grobecker and Bill Stockly. THE SARGASSUM FROGFISH, *HISTRIO HISTRIO* (LINNAEUS) (LOPHIIFORMES: ANTENNARIIDAE), ON THE PACIFIC PLATE. *Copeia* 1992(1):247-248. 1992. FR 37(2)
[School Fish., Coll. Ocean & Fish. Sci., Univ. Wash., Seattle 98195]

92-003062 Pigg, Jimmie and Randy Parham. RANGE EXTENSION INTO WESTERN OKLAHOMA OF THE WHITE SUCKER, *CASTOSTOMUS COMMERSONI* (LACEPEDE). *Proc. Okla. Acad. Sci.* Vol. 71. p. 51. 1991. FR 37(2)
[State Dep. Health, Oklahoma City, OK 73124]

92-003063 Reay, P. J. *MUGIL CEPHALUS* L. - A FIRST BRITISH RECORD AND A FURTHER 5ÉN. *J. Fish Biol.* 40(2):311-313. 1992. FR 37(2)
[Dep. Biol. Sci., Polytechnic S.W., Drake Circus, Plymouth PL4 8AA, England]

92-003064 Rowe, David. NATIVE FISH HABITAT AND DISTRIBUTION. *Freshwater Catch* No. 46. p. 4-6. 1991. FR 37(2)
Galaxias.

92-003065 Sanders, Randall E. and James P. Stricko. DARTERS (PERCIDAE) OF THE OHIO RIVER: OHIO'S SHORELINE ASSEMBLAGES FROM MILE 66.2 TO 487.2. *Ohio J. Sci.* 92(2):10. 1992. Abstract only. FR 37(2)
[Environ. Prot. Agency, Div. Water Quality Planning & Assessment, 1685 W. Belt Dr., Columbus, OH 43228] Data for 10 species.

92-003066 Schoffmann, Johanne. [FIRST FIELD OBSERVATION OF *SALMO (PLATYSALMO) PLATYCEPHALUS.*] *Oesterreichs Fischerei* 45(1):11-18. 1992. In German with English summ. FR 37(2)
[Lastenstr. 25, A-9300 St. Veit/Glan, Austria]

92-003067 Shcherbak, G. I., editor. [INVERTEBRATES AND FISHES IN THE DNIEPER RIVER AND ITS RESERVOIRS.] *Naukova Dumka* 243p. 1989. In Russian. From Protozool. Abstr. 15(11-12):5013. 1991. FR 37(2)
[Hydrobiol. Inst., Ukrainian Acad. Sci., Kiev, USSR]

92-003068 Simons, Marcus. WHAT'S HAPPENING WITH KOI CARP? *Freshwater Catch* No. 47. p. 4-5. 1991. FR 37(2)
[Freshwater Fish., Dep. Conserv., Wellington, New Zealand] *Cyprinus carpio* in New Zealand.

GEOGRAPHICAL DISTRIBUTION, FISH SURVEYS, ETC. (Continued)

92-003069 Snelson, Franklin F., Jr. DISTRIBUTION OF THE BLUEBARRED PYGMY SUNFISH *ELASSOMA OKATIE*. *Fla. Sci.* 55(Suppl. 1):12. 1992. Abstract only. FR 37(2)

[Dep. Biol., Univ. Cent. Fla., Orlando 32816]

92-003070 Sunaga, Tetsuo and Jose R. Verani. THE FISH COMMUNITIES OF THE LAKES IN RIO DOCE VALLEY, NORTHEAST BRAZIL. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2563-2566. 1989. FR 37(2)

[Biol. Lab., Fac. Educ., Kagawa Univ., Takamatsu, Kagawa 760, Japan]

92-003071 Thomerson, Jim and Don Taphorn. THE ANNUAL KILLIFISHES OF VENEZUELA. PART 1: MARACAIBO BASIN AND COASTAL PLAIN SPECIES. *Trop. Fish Hobbyist* 40(5):70-72, 76, 78, 80, 82, 84, 86, 88-90, 92-96. 1992. FR 37(2)

Austrofundulus limnaeus, Rachovia brevis, R. hummelincki, and *R. pyropunctata.*

92-003072 Wood, Robert M. and Richard L. Mayden. SYSTEMATICS, EVOLUTION, AND BIOGEOGRAPHY OF *NOTROPIS CHLOROCEPHALUS* AND *N. LUTIPINNIS*. *Copeia* 1992(1):68-81. 1992. FR 37(2)

[Dep. Biol., Univ. Ala., Box 870344, Tuscaloosa 35487-0344]

92-003073 Wu Yun-Fei and Tan Qi-Jia. [CHARACTERISTICS OF THE FISH-FAUNA OF THE CHARACTERISTICS OF QINGHAI-XIZANG PLATEAU AND ITS GEOLOGICAL DISTRIBUTON AND FORMATION.] *Acta Zool. Sin.* 37(2):135-152. 1991. In Chinese with English summ. FR 37(2)

[Northwest Plateau Inst. Biol., Acad. Sinica, Qinghai, Xining, China]

ABUNDANCE, FACTORS OF; SURVIVAL AND MORTALITY

92-003074 Bohlen, Jorg. [OBSERVATIONS ON THE DISTRIBUTION, BIOLOGY, AND ENDANGERED STATUS OF THE EUROPEAN MUDMINNOW, *UMBRA KRAMERI*, WALBAUM 1792 (PISCES, UMBRIDEA).] *Oesterreichs Fischerei* 44(11/12):286-290. 1991. In German with English summ. FR 37(2)

[Ehnernstr. 103, D-2900 Oldenburg, Germany]

92-003075 Borawa, James C. FIELD EVALUATION OF DOMESTIC VERSUS HALF-WILD BROWN TROUT FINGERLING STOCKINGS. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 72-78. 1990. FR 37(2)

[Wildl. Resour. Comm., 512 N. Salisbury St., Raleigh, NC 27604-1188] *Salmo trutta.*

92-003076 Bortone, Stephen A.; James Van Tassell; Alberto Brito; Jesus M. Falcon and Charles M. Bundrick. A VISUAL ASSESSMENT OF THE INSHORE FISHES AND FISHERY RESOURCES OFF EL HIERRO, CANARY ISLANDS: A BASELINE SURVEY. *Sci. Mar.* 55(3):529-541. 1991. In English with Spanish summ. FR 37(2)

[Biol. Dep., Univ. W. Fla., Pensacola 32514] *Sparisoma cretense.*

92-003077 Brown, R. W. and W. W. Taylor. EFFECTS OF EGG COMPOSITION AND PREY DENSITY ON THE LARVAL GROWTH AND SURVIVAL OF LAKE WHITEFISH (*COREGONUS CLUPEAFORMIS* MITCHILL). *J. Fish Biol.* 40(3):381-394. 1992. FR 37(2)

[Dep. Fish. & Wildl., Mich. State Univ., East Lansing 48824]

92-003078 Crow, Gerald L.; James A. Brock; Jeffrey C. Howe and Beth E. Linnon. SHARK BITE WOUNDS OF THE VALVULAR INTESTINE: THE CAUSE OF AN ACUTE MORTALITY SYNDROME OF CAPTIVE BLACKTIP REEF SHARKS, *CARCHARHINUS MELANOPTERUS*. *Zoo Biol.* 10(6):457-463. 1991. FR 37(2)

[Waikiki Aquarium, 2777 Kalakaua Ave., Honolulu, HI 96815]

92-003079 Green, K.; R. Williams and H. R. Burton. THE DIET OF ANTARCTIC FUR SEALS DURING THE LATE AUTUMN AND EARLY WINTER AROUND HEARD ISLAND. *Antarct. Sci.* 3(4):359-361. 1991. FR 37(2)

[Antarctic Div., Channel Hwy., Kingston, Tasm. 7050, Australia] *Gymnoscopelus nicholsi* and data for 23 other species in Antarctica.

92-003080 Hoff, Thomas Barry. CONSERVATION AND MANAGEMENT OF THE WESTERN NORTH ATLANTIC SHARK RESOURCE BASED ON THE LIFE HISTORY STRATEGY LIMITATIONS OF SANDBAR SHARKS. *Ph.D. dissertation, Univ. Del.* 299p. 1990. From Diss. Abstr. Int. B Sci. Eng. 52(9):4628. 1992. Order No. DA9206312. FR 37(2)

Odontaspis taurus.

92-003081 Jensen, A. L. RELATION BETWEEN MORTALITY OF YOUNG WALLEYE (*STIZOSTEDION VITREUM*) AND RECRUITMENT WITH DIFFERENT FORMS OF COMPENSATION. *Environ. Pollut.* 76(2):177-181. 1992. FR 37(2)

[School Nat. Resour., Univ. Mich., Ann Arbor 48109-1115]

92-003082 Lenanton, R. C.; L. Joll; J. Penn and K. Jones. THE INFLUENCE OF THE LEEUWIN CURRENT ON COASTAL FISHERIES OF WESTERN AUSTRALIA. *J. R. Soc. West. Aust.* 74(1):101-114. 1991. FR 37(2)

[Western Australian Mar. Res. Lab., P.O. Box 20, North Beach, W.A. 6020, Australia]

ABUNDANCE, FACTORS OF; SURVIVAL AND MORTALITY (Continued)

92-003083 Maceina, Michael J.; Phillip W. Bettoli; Wallace G. Klussmann; Robert K. Betsill and Richard L. Noble. EFFECT OF AQUATIC MACROPHYTE REMOVAL ON RECRUITMENT AND GROWTH OF BLACK CRAPPIES AND WHITE CRAPPIES IN LAKE CONROE, TEXAS. *N. Am. J. Fish. Manage.* 11(4):556-563. 1991. FR 37(2)

[Dep. Fish. & Allied Aquacult., Auburn Univ., Auburn, AL 36849] *Dorosoma petenense, Ctenopharyngodon idella, Pomoxis nigromaculatus,* and *P. annularis.*

92-003084 McDonough, Thomas A. and Johnny P. Buchanan. FACTORS AFFECTING ABUNDANCE OF WHITE CRAPPIES IN CHICKAMAUGA RESERVOIR, TENNESSEE, 1970-1989. *N. Am. J. Fish. Manage.* 11(4):513-524. 1991. FR 37(2)

[Tenn. Valley Authority, Data Syst. Dep., Knoxville 37902] *Pomoxis nigromaculatus* and *P. annularis.*

92-003085 McKay, L. R.; P. E. Ihssen and I. McMillan. EARLY MORTALITY OF TIGER TROUT (*SALVELINUS FONTINALIS* X *SALMO TRUTTA*) AND THE EFFECTS OF TRIPLOIDY. *Aquaculture* 102(1/2):43-54. 1992. FR 37(2)

[Cent. Genet. Livestock, Dep. Anim. & Poultry Sci., Univ. Guelph, Guelph, ON, Canada, N1G 2W1]

92-003086 Sutter, Frederick C. III; Roy O. Williams and Mark F. Godcharles. GROWTH AND MORTALITY OF KING MACKEREL *SCOMBEROMORUS CAVALLA* TAGGED IN THE SOUTHEASTERN UNITED STATES. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):733-737. 1991. FR 37(2)

[Mar. Res. Inst., Dep. Nat. Resour., 100 Eighth Ave. SE, St. Petersburg, FL 33701-5095]

92-003087 Szedlmayer, S. T.; K. W. Able and R. A. Rountree. GROWTH AND TEMPERATURE-INDUCED MORTALITY OF YOUNG-OF-THE YEAR SUMMER FLOUNDER (*PARALICHTHYS DENTATUS*) IN SOUTHERN NEW JERSEY. *Copeia* 1992(1):120-128. 1992. FR37(2)

[Auburn Univ. Mar. Ext. & Res. Cent., 4170 Commanders Dr., Mobile, AL 36615]

92-003088 Ventling-Schwank, Andrea and Rudolf Muller. SURVIVAL OF COREGONID (*COREGONUS* SP.) EGGS IN LAKE SEMPACH, SWITZERLAND. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2451-2454. 1989. FR 37(2)

[Lake Res. Lab., EAWAG/ETH, 6047 Kastanienbaum, Switzerland]

92-003089 Veshchev, P. V. EFFECTIVENESS OF NATURAL PRODUCTION IN THE STELLATE STURGEON, *ACIPENSER STELLATUS,* UNDER CONDITIONS OF REGULATED FLOW IN THE VOLGA. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):76-83. 1991. FR 37(2)

[Caspian Fish. Res. Inst., Astrakhan, USSR]

IDENTIFICATION, KEYS, CLASSIFICATION

92-003090 Bannikov, A. F. ON THE SYSTEMATIC POSITION OF THE FAMILY CAPROIDAE WITH REFERENCE TO THE EOCENE GENUS *ACANTHONEMUS. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):47-58. 1991. FR 37(2)

[Paleontol. Inst., USSR Acad. Sci., Moscow, USSR]

92-003091 Bath, Hans and John E. Randall. [SYNOPSIS OF THE GENUS *SALARIAS* CUVIER 1817 WITH A DESCRIPTION OF A NEW SPECIES (PISCES: BLENNIIDAE).] *Senckenb. Biol.* 71(4/6):245-258. 1991. In German with English summ. FR 37(2)

[Luisenstr. 45, D-6780 Pirmasens, Germany] *S. segmentatus* in the Caroline Islands.

92-003092 Burgess, Warren E. and Jerry G. Walls. THE NAME GAME: THE *CICHLASOMA* QUESTION. *Trop. Fish Hobbyist* 40(7):90-92, 94, 96. 1992. FR 37(2)

92-003093 Burridge, Mary E. SYSTEMATICS OF THE *ACANTHOPHTHALMUS KUHLII* COMPLEX (TELEOSTEI: COBITIDAE), WITH THE DESCRIPTION OF A NEW SPECIES FROM SARAWAK AND BRUNEI. *Copeia* 1992(1):172-186. 1992. FR 37(2)

[Dep. Ichthyol. & Herpetol., Royal Ontario Mus., 100 Queens Park, Toronto, ON, Canada M5S 2C6] *A. agmus.*

92-003094 Eldon, G. A. (Tony). THE GALAXIIDS OF NEW ZEALAND. *Trop. Fish Hobbyist* 40(7):98-100, 102, 104, 106-108, 110. 1992. FR 37(2)

92-003095 Gandolfi, Gilberto and Sergio Zerunian. [THE FRESHWATER FISHES OF ITALY: REMARKS ABOUT THE CRITICISM TO OUR PREVIOUS CONTRIBUTION.] *Atti Soc. Ital. Sci. Nat. Mus. Civ. Stor. Nat. Milano* 131(21):293-307. 1991. In Italian with English summ. FR 37(2)

[Dep. Biol. & Fisiol. Gen., Univ. Parma, Viale Sci., 43100 Parma, Italy]

IDENTIFICATION, KEYS, CLASSIFICATION (Continued)

92-003096 Haas, Gordon R. and J. D. McPhail. SYSTEMATICS AND DISTRIBUTIONS OF DOLLY VARDEN (*SALVELINUS MALMA*) AND BULL TROUT (*SALVELINUS CONFLUENTUS*) IN NORTH AMERICA. *Can. J. Fish. Aquat. Sci.* 48(11):2191-2211. 1991. In English with French summ. FR 37(2)

[Ecol. Group & Fish Mus., Dep. Zool., Univ. British Columbia, 6270 University Blvd., Vancouver, BC, Canada V6T 1Z4]

92-003097 Hoese, Douglass F. A REVISION OF THE TEMPERATE AUSTRALIAN GOBIID (GOBIOIDEI) FISH GENUS *TASMANOGOBIUS* WITH A COMMENT ON THE GENUS *KIMBERLEYELEOTRIS*. *Mem. Mus. Vic.* 52(2):361-376. 1991. FR 37(2)

[Australian Mus., P.O. Box A285, Sydney South, N.S.W. 2001, Australia] *T. lasti* and *T. gloveri*.

92-003098 Iwamoto, Tomio and Yuri N. Shcherbachev. MACROURID FISHES OF THE SUBGENUS *CHALINURA*, GENUS *CORYPHAENOIDES*, FROM THE INDIAN OCEAN. *Proc. Calif. Acad. Sci.* 47(7):207-233. 1991. FR 37(2)

[Dep. Ichthyol., Calif. Acad. Sci., Golden Gate Park, San Francisco 94118]

92-003099 Karpenko, V. I. and V. P. Kislyakov. IDENTIFICATION OF JUVENILE PACIFIC SALMON OF THE GENUS *ONCORHYNCHUS* DURING THE MARINE PERIOD OF LIFE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):122-127. 1991. FR 37(2)

[Kamchatka Sect., Pac. Res. Inst. Fish. & Oceanogr. (KoTINRO), Petropavlovsk-Kamchatskiy, USSR] *O. kisutch, O. masou, O. tshawytscha, O. nerka, O. keta, O. gorbuscha.*

92-003100 Kottelat, Maurice. COMMENTS ON THE PROPOSED PRECEDENCE OF *HOMALOPTERIDAE* BLEEKER, 1859 OVER *BALITORIDAE* SWAINSON, 1839 (OSTEICHTHYES, CYPRINIFORMES). *Bull. Zool. Nomencl.* 48(4):333-335. 1991. FR 37(2)

[Zool. Staatssammlung, Munchhausenstr. 21, D-8000 Munich 60, Germany]

92-003101 Lavenberg, Robert J. A NEW MORAY EEL (MURAENIDAE: *GYMNOTHORAX*) FROM OCEANIC ISLANDS OF THE SOUTH PACIFIC. *Pac. Sci.* 46(1):58-67. 1992. FR 37(2)

[Sect. Fishes, Nat. Hist. Mus. Los Angeles Cty., 900 Exposition Blvd., Los Angeles, CA 90007-4000] *G. australicola.*

92-003102 Lucena, Carlos A. S.; Luiz R. Malabarba and Roberto E. Reis. RESURRECTION OF THE NEOTROPICAL PIMELODID CATFISH *PARAPIMELODUS NIGRIBARBIS* (BOULENGER), WITH A PHYLOGENETIC DIAGNOSIS OF THE GENUS *PARAPIMELODUS* (TELEOSTEI: SILURIFORMES). *Copeia* 1992(1):138-146. 1992. In English with Portuguese summ. FR 37(2)

[Lab. Ictiol., Mus. Cienc. Pucrs, P.O. Box 1429, 90620 Porto Alegre, RS, Brazil]

92-003103 Paulin, K. D. TWO NEW SPECIES OF THE GENUS *PHYSICULUS* (MORIDAE) FROM SEAMOUNTS OF THE SOUTHEASTERN PART OF THE PACIFIC OCEAN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):1-5. 1991. FR 37(2)

[Natl. Mus. New Zealand, Wellington, New Zealand] *P. parini* and *P. sazonovi.*

92-003104 Pavlov, Yu. P. *BRAMA AUSTRALIS* VALENCIENNES - A VALID SPECIES OF SEA BREAM (BRAMIDAE) FROM THE SOUTHEASTERN PACIFIC OCEAN. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):6-9. 1991. FR 37(2)

[All-Union Sci. Res. Inst. Mar. Fish. & Oceanogr. (VNIRO), Moscow, USSR]

92-003105 Reis, Roberto E. and Scott A. Schaefer. *EURYCHEILUS PANTHERINUS* (SILUROIDEI: LORICARIIDAE), A NEW GENUS AND SPECIES OF HYPOPTOPOMATINAE FROM SOUTHERN BRAZIL. *Copeia* 1992(1):215-223. 1992. In English with Portuguese summ. FR 37(2)

[Lab. Ictiol., Mus. Cienc. Pucrs, P.O. Box 1429, 90620 Porto Alegre, RS, Brazil]

92-003106 Suttkus, Royal D. and David A. Etnier. *ETHEOSTOMA TALLAPOOSAE* AND *E. BREVIROSTRUM*, TWO NEW DARTERS, SUBGENUS *ULOCENTRA*, FROM THE ALABAMA RIVER DRAINAGE. *Tulane Stud. Zool. Bot.* 28(1):24p. 1991. FR 37(2)

[Mus. Nat. Hist., Tulane Univ., Belle Chasse, LA 70037]

92-003107 Swing, Cecil Kelly. ICHTHYOFAUNAL SURVEY OF TUMI CHUCUA, A LAKE IN AMAZONIAN BOLIVIA. *M.S. thesis, Auburn Univ.* 115p. 1985. FR 37(2)

92-003108 Talwar, P. K. and Arun G. Jhingran. INLAND FISHES OF INDIA AND ADJACENT COUNTRIES. *A.A. Balkema Publ.* Vol. 1&2. 1177p. 1992. Available at $175.00 (cloth) from A.A. Balkema Publ., Old Post Rd., Brookfield, VT 05036. FR 37(2)

[North. Reg. Stn., Zool. Surv. India, Dehra Dun, India]

IDENTIFICATION, KEYS, CLASSIFICATION (Continued)

92-003109 Tighe, Kenneth A. *BEOHLKENCHELYS LONGIDENTATA*, A NEW GENUS AND SPECIES OF CHLOPSID EEL (TELEOSTEI: ANGUILLIFORMES) FROM THE INDO-WEST PACIFIC REGION. *Proc. Biol. Soc. Wash.* 105(1):19-22. 1992. FR 37(2)
[Dep. Vertebr. Zool., Natl. Mus. Nat. Hist., Smithsonian Inst., Washington, DC 20560]

92-003110 Trunov, I. A. FISHES OF THE FAMILY MORIDAE FROM THE SOUTHEASTERN ATLANTIC OCEAN (GENERA *MORA* RISSO AND *PHYSICULUS* KAUP). *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(6):110-116. 1991. FR 37(2)
[Atl. Fish. & Oceanogr. Res. Inst., AtlantNIRO, Kaliningrad, USSR] *P. maslowskii, P. huloti, P. helenaensis, P. capensis, P. karrerae,* and *M. moro.*

92-003111 Zerunian, Sergio. [CONCERNING THE SCIENTIFIC NAME OF THE ITALIAN RED-EYE ROACH (OSTEICHTHYES, CYPRINIDAE).] *Atti Soc. Ital. Sci. Nat. Mus. Civ. Stor. Nat. Milano* 131(20):285-289. 1990. In Italian with English summ. FR 37(2)
[Lab. Ittiol. Acque Dolci, I-04010 Maenza (LT), Italy] *Rutilus erythrophthalmus.*

92-003112 Zhao Tie-Qiao. [FISH-FAUNA AND ZOOGEOGRAPHICAL DIVISION OF HEXI-ALASHAN REGION, THE NORTHWEST CHINA.] *Acta Zool. Sin.* 37(2):153-167. 1991. In Chinese with English summ. FR 37(2)
[Shanxi Inst. Zool., Xian, China]

PARASITES AND DISEASES-GENERAL

92-003113 Awakura, T. PARASITOLOGY OF MASU SALMON, *ONCORHYNCHUS MASOU*, IN NORTHERN JAPAN. *Physiol. Ecol. Jpn.* Spec. Vol. 1. p. 605-614. 1989. From Protozool. Abstr. 15(11-12):4488. 1991. FR 37(2)
[Hokkaido Fish Hatchery, Kitakashiwagi-3, Eniwa, Hokkaido 061-14, Japan]

92-003114 Carvajal, Juan; Gloria Ruiz and Laura Gonzalez. [GILL HISTOPATHOLOGIES IN COHO SALMON *(ONCORHYNCHUS KISUTCH)* AND ATLANTIC SALMON *(SALMO SALAR)* RAISED UNDER NET CAGES IN SOUTHERN CHILE.] *Medio Ambiente* 11(1):53-58. 1990. In Spanish with English summ. FR 37(2)
[Dep. Pesq., Inst. Profesional Osorno, Casilla 557, Puerto Montt, Chile]

92-003115 Figueroa, L. and S. Puga. [*LECITHASTER PACIFICUM* N. SP., (DIGENEA: HEMIURIDAE), PARASITE OF *PARALICHTHYS MICROPS* (PLEURONECTYFORMES: BOTHIDAE) ON THE COAST OF VALDIVIA, CHILE.] *Arch. Med. Vet. (Valdivia)* 23(1):101-104. 1991. In Spanish with English summ. FR 37(2)
[Inst. Parasitol., Fac. Med., Univ. Austral Chile, Casilla 567, Valdivia, Chile]

92-003116 Heinze, Wolfgang and F. Weirowski. [PHARMACOKINETICS OF SULPHAMERAZINE AND TRIMETHOPRIM IN CARP, WITH PARTICULAR REFERENCE TO AGE AND POND TEMPERATURE.] *Monatsh. Veterinarmed.* 46(24):843-848. 1991. In German with English summ. FR 37(2)
[Inst. Pharmakol. & Toxikol. Veterinarmed. Fak. Humboldt-Univ., Berlin, Hermann-Matern-Str. 56, O-1040 Berlin, Germany] *Cyprinus carpio.*

92-003117 Lopinot, Al. SOME FARM POND DISEASES. *Farm Pond Harvest* 26(1):18-19. 1992. FR 37(2)

92-003118 Ranta, Esa. GREGARIOUSNESS VERSUS SOLITUDE: ANOTHER LOOK AT PARASITE FAUNAL RICHNESS IN CANADIAN FRESHWATER FISHES. *Oecologia (Heidelb.)* 89(1):150-152. 1992. FR 37(2)
[Integrative Ecol. Unit, Dep. Zool., Univ. Helsinki, P. Rautatiekatu 13, SF-00100 Helsinki, Finland]

92-003119 Riffo L., Renzo. [FIRST PARASITOLOGICAL REPORT ON *STRANGOMERA BENTINCKI* (NORMAN, 1936) AND *ENGRAULIS RINGENS* JENYNS, 1842 (PISCES: CLUPEIFORMES) ON THE CHILEAN COAST.] *Medio Ambiente* 11(1):59-64. 1990. In Spanish with English summ. FR 37(2)
[Dep. Cienc. Mar, Pontificia Univ. Catolica Chile, Sede Reg. Talcahuano, Casilla 127, Talcahuano, Chile]

92-003120 Szalai, Alexander J. and Terry A. Dick. EVALUATION OF GILL NETS, FYKE NETS, AND MARK-RECAPTURE METHODS TO ESTIMATE THE NUMBER OF HIRUDINEA AND CRUSTACEA ON FISH. *J. Parasitol.* 77(6):914-922. 1991. FR 37(2)
[Dep. Microbiol., Univ. Miss. Med. Cent., Jackson 39216-4505]

92-003121 Wawrzyniak, Wawrzyniec and Edward Grawinski. AN ATTEMPTED DIAGNOSIS OF ETIOLOGY AND PATHOGENESIS OF ULCER AND NECROTIC FOCI OF SOME BALTIC FISHES. *Acta Ichthyol. Piscatoria* 21(1):43-58. 1991. In English with Polish summ. FR 37(2)
[Katedra Ekol., Univ. Szczecinski, Felczaka 3a, 7 71-412 Szczecin, Poland] *Oncorhynchus mykiss, Anguilla anguilla, Gadus morhua,* and *Platichthys flesus.*

92-003122 Wierzbicka, Jadwiga. PARASITE FAUNA OF THE GREENLAND HALIBUT, *REINHARDTIUS HIPPOGLOSSOIDES* (WALBAUM, 1792) FROM LABRADOR AREA. *Acta Ichthyol. Piscatoria* 21(1):21-29. 1991. In English with Polish summ. FR 37(2)
[Inst. Ichtiol., Kazimierza Krolewicza 4, 71-550 Szczecin, Poland]

PARASITES AND DISEASES-GENERAL (Continued)

92-003123 Williams, Ernest H., Jr.; Lucy Bunkley-Williams; Michael J. Dowgiallo and William G. Dyer. INFLUENCE OF COLLECTION METHODS ON THE OCCURRENCE OF ALIMENTARY CANAL HELMINTH PARASITES IN FISH. *J. Parasitol.* 77(6):1019-1022. 1991. FR 37(2)

[Caribbean Aquat. Anim. Health Proj., Dep. Mar. Sci., Univ. Puerto Rico, P.O. Box 908, Lajas 00667-0980] *Haemulon flavolineatum.*

BACTERIAL DISEASES

92-003124 Austin, B. and M. Stobie. RECOVERY OF YELLOW-PIGMENTED BACTERIA FROM DEAD AND MORIBUND FISH DURING OUTBREAKS OF RAINBOW TROUT, *ONCORHYNCHUS MYKISS* (WALBAUM), FRY SYNDROME IN ENGLAND. *J. Fish Dis.* 14(6):677-682. 1991. FR 37(2)

[Div. Aquacult., Dep. Biol. Sci., Heriot-Watt Univ., Riccarton, Edinburgh EH14 4AS, Scotland]

92-003125 Barnes, A. C.; S. G. B. Amyes; T. S. Hastings and C. S. Lewin. FLUOROQUINOLONES DISPLAY RAPID BACTERICIDAL ACTIVITY AND LOW MUTATION FREQUENCIES AGAINST *AEROMONAS SALMONICIDA. J. Fish Dis.* 14(6):661-667. 1991. FR 37(2)

[Dep. Med. Microbiol., Univ. Edinburgh, Teviot Pl., Edinburgh EH8 9AG, Scotland]

92-003126 Bartholomew, J. L.; M. R. Arkoosh and J. S. Rohovec. DEMONSTRATION OF THE SPECIFICITY OF THE SALMONID HUMORAL RESPONSE TO *RENIBACTERIUM SALMONINARUM* WITH A MONOCLONAL ANTIBODY AGAINST SALMONID IMMUNOGLOBULIN. *J. Aquat. Anim. Health* 3(4):254-259. 1991. FR 37(2)

[Dep. Microbiol., Oreg. State Univ., Corvallis 97331] *Oncorhynchus kisutch* and *O. tshawytscha.*

92-003127 Bjorklund, H. V.; A. Eriksson and G. Bylund. TEMPERATURE-RELATED ABSORPTION AND EXCRETION OF OXOLINIC ACID IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquaculture* 102(1/2):17-27. 1992. FR 37(2)

[Inst. Parasitol., Abo Akad. Univ., Porthansgatan 3, SF-20500 Abo, Finland]

92-003128 Chattopadhyay, U. K.; D. Pal; M. S. Das; A. K. Pramanik and R. N. Pal. ASSOCIATION OF FISH AND ENVIRONMENTAL STRAINS OF *AEROMONAS HYDROPHILA* IN THE CAUSATION OF ULCERATIVE DISEASE SYNDROME IN FISH. *Int. J. Environ. Health Res.* 2(1):18-23. 1992. FR 37(2)

[Dep. Microbiol., All India Inst. Hygiene & Public Health, 110 Chittaranjan Ave., Calcutta-700 073, India] *Ophicephalus punctatus, Labeo rohita* and *Clarias batrachus.*

92-003129 Choi, Hye Sung. [STUDY ON *EDWARDSIELLA TARDA* ISOLATED FROM CULTURED BASTARD HALIBUT (*PARALICHTHYS OLIVACEUS*).] *Bull. Natl. Fish. Res. Dev. Agency* No. 45. p. 197-205. 1991. In Korean. From Korean Sci. Abstr. 23(6):2326. 1991. FR 37(2)

92-003130 Csaba, G.; J. Szakolczai and L. Toth. [REDMOUTH DISEASE OF TROUT IN HUNGARY.] *Magy. Allatorv. Lapja* 46(7):395-401. 1991. In Hungarian with Russian, English, and German summ. From Anim. Dis. Occurrence 12(1):875. 1991. FR 37(2)

[AESZ, Allat- egeszsegugyi Intezet, 1149 Budapest, Tabornok u. 2, Hungary]

92-003131 Dalsgaard, I.; O. Jurgens and A. Mortensen. *VIBRIO SALMONICIDA* ISOLATED FROM FARMED ATLANTIC SALMON IN THE FAROE ISLANDS. *Bull. Eur. Assoc. Fish Pathol.* 8(3):53-54. 1988. From Anim. Dis. Occurrence 12(1):869. 1991. FR 37(2)

[Fish. Dis. Lab., c/o Royal Vet. & Agric. Univ., 1870 Frederiksberg, Frederiksberg C, Denmark] *Salmo salar* in the Faroe Islands.

92-003132 Davies, R. L. *YERSINIA RUCKERI* PRODUCES FOUR IRON-REGULATED OUTER MEMBRANE PROTEINS BUT DOES NOT PRODUCE DETECTABLE SIDEROPHORES. *J. Fish Dis.* 14(5):563-570. 1991. FR 37(2)

[Dep. Microbiol., Univ. Glasgow, Glasgow G12 8QQ, Scotland]

92-003133 Dixon, Beverly and Gerard Issvoran. ANTIBIOTIC RESISTANCE OF *AEROMONAS* SPP. ISOLATED FROM DOMESTIC GOLDFISH (*CARASSIUS AURATUS*). *J. World Aquacult. Soc.* 22(3):22A. 1991. Abstract only. FR 37(2)

[Dep. Biol. Sci., Calif. State Univ., Hayward 94542]

92-003134 Frerichs, G. N. and A. Holliman. ISOLATION OF A BROWN PIGMENT-PRODUCING STRAIN OF *PSEUDOMONAS FLUORESCENS* CROSS-REACTING WITH *AEROMONAS SALMONICIDA* DIAGNOSTIC ANTISERA. *J. Fish Dis.* 14(5):599-601. 1991. FR 37(2)

[Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland] *Salmo salar.*

92-003135 Griffin, B. R. A SIMPLE PROCEDURE FOR IDENTIFICATION OF *CYTOPHAGA COLUMNARIS. J. Aquat. Anim. Health* 4(1):63-66. 1992. FR 37(2)

[Fish Farming Exp. Lab., U.S. Fish & Wildl. Serv., P.O. Box 860, Stuttgart, AR 72160]

BACTERIAL DISEASES (Continued)

92-003136 Hinshaw, Jeffrey M.; Colleen A. Caldwell and Richard J. Vogt. PHYSIOLOGICAL AND IMMUNOLOGICAL RESPONSE OF RAINBOW TROUT TO OXYGEN CONCENTRATION AND ENTERIC REDMOUTH CHALLENGE. *J. World Aquacult. Soc.* 22(3):29A-30A. 1991. Abstract only. FR 37(2)

[Dep. Zool., N.C. State Univ., 2016 Fanning Bridge Rd., Fletcher 28732] *Oncorhynchus mykiss.*

92-003137 Husevag, B.; B. T. Lunestad; P. J. Johannessen; O. Enger and O. B. Samuelsen. SIMULTANEOUS OCCURRENCE OF *VIBRIO SALMONICIDA* AND ANTIBIOTIC-RESISTANT BACTERIA IN SEDIMENTS AT ABANDONED AQUACULTURE SITES. *J. Fish Dis.* 14(6):631-640. 1991. FR 37(2)

[Lunestad: Dep. Microbiol. & Plant Physiol., Univ. Bergen, Jahnebakken 5, 5007 Bergen, Norway] *Gadus morhua* and *Salmo salar* in Norway.

92-003138 Iida, Takaji; Hiroyuki Yonekura; Masafumi Izumiyama and Hisatsugu Wakabayashi. INDIRECT ENZYME-LINKED IMMUNOSORBENT ASSAY (ELISA) FOR THE DETECTION OF EEL SERUM ANTIBODY. *Fish Pathol.* 26(4):201-205. 1991. In English with Japanese summ. FR 37(2)

[Dep. Fish., Fac. Agric., Univ. Tokyo, Yayoi 1-1-1, Bunkyo-ku, Tokyo 113, Japan] *Anguilla japonica.*

92-003139 Inglis, V.; M. K. Soliman; I. Higuera Ciapara and R. H. Richards. AMOXYCILLIN IN THE CONTROL OF FURUNCULOSIS IN ATLANTIC SALMON PARR. *Vet. Rec.* 130(3):45-48. 1992. FR 37(2)

[Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland] *Salmo salar.*

92-003140 Ishida, Noriko. TISSUE LEVELS OF OXOLINIC ACID AFTER ORAL OR INTRAVASCULAR ADMINISTRATION TO FRESHWATER AND SEAWATER RAINBOW TROUT. *Aquaculture* 102(1/2):9-15. 1992. FR 37(2)

[Natl. Res. Inst. Fish. Sci., 5-5-1 Kachidoki, Chuo-ku 104, Japan] *Oncorhynchus mykiss.*

92-003141 Jaksic, S.; J. Zivkovic; S. Uhitil and K. Matisic. [ISOLATION OF *VIBRIO VULNIFICUS* FROM MARINE FISHES AND SHELLFISH.] *Vet. Arhiv.* 60(1):9-13. 1990. In Serbo-croatian with English summ. From Anim. Dis. Occurrence 12(1):874. 1991. FR 37(2)

92-003142 Jansson, E.; T. Hongslo; R. Lindberg; O. Ljungberg and B.-M. Svensson. DETECTION OF *RENIBACTERIUM SALMONINARUM* AND *YERSINIA RUCKERI* BY THE PEROXIDASE-ANTIPEROXIDASE IMMUNOHISTOCHEMICAL TECHNIQUE IN MELANIN-CONTAINING CELLS OF FISH TISSUES. *J. Fish Dis.* 14(6):689-692. 1991. FR 37(2)

[Natl. Vet. Inst., Box 7073, S-750 07 Uppsala, Sweden] *Salmo salar* and *Oncorhynchus mykiss.*

92-003143 Johnson, Michael R. and A. Jerald Ainsworth. AN ELEVATED DIETARY LEVEL OF ASCORBIC ACID FAILS TO INFLUENCE THE RESPONSE OF ANTERIOR KIDNEY NEUTROPHILS TO *EDWARDSIELLA ICTALURI* IN CHANNEL CATFISH. *J. Aquat. Anim. Health* 3(4):266-273. 1991. FR 37(2)

[Delta Branch Exp. Stn., P.O. Box 197, Stoneville, MS 38776] *Ictalurus punctatus.*

92-003144 Kawahara, Eijiro; Tomohiro Ueda and Setsuzo Nomura. *IN VITRO* PHAGOCYTIC ACTIVITY OF WHITE-SPOTTED CHAR BLOOD CELLS AFTER INJECTION WITH *AEROMONAS SALMONICIDA* EXTRACELLULAR PRODUCTS. *Fish Pathol.* 26(4):213-214. 1991. In English with Japanese summ. FR 37(2)

[Lab. Aquat. Microbiol., School Fish. Sci., Kitasato Univ., Sanriku, Kesen, Iwate 022-01, Japan] *Salvelinus leucomaenis.*

92-003145 Kawahara, Eijiro; Hiroshi Sako; Setsuzo Nomura and Riichi Kusuda. PROPERTIES OF HEMOLYSIN PRODUCED BY β-HEMOLYTIC *STREPTOCOCCUS* SP. ISOLATED FROM YELLOWTAIL *(SERIOLA QUINQUERADIATA). Fish Pathol.* 26(4):177-181. 1991. In English with Japanese summ. FR 37(2)

[Lab. Aquat. Micorbiol., School Fish Sci., Kitasato Univ., Sanriku, Kesen, Iwate 022-01, Japan]

92-003146 Lee, K.-K. and A. E. Ellis. INTERACTIONS BETWEEN SALMONID SERUM COMPONENTS AND THE EXTRACELLULAR HAEMOLYTIC TOXIN OF *AEROMONAS SALMONICIDA. Dis. Aquat. Org.* 11(3):207-216. 1991. FR 37(2)

[Ellis: SOAFD Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8DB, Scotland] *Salmo salar* and *Oncorhynchus mykiss.*

92-003147 Maguzzu, S. [*PASTEURELLA PISCICIDA* IS THE CAUSAL AGENT OF A NEW DISEASE OF FISHES.] *Nuovo Prog. Vet.* 45(19):646-647. 1990. In Italian. From Anim. Dis. Occurrence 12(1):873. 1991. FR 37(2)

Dicentrarchus labrax and *Sparus auratus.*

92-003148 Martinsen, Bernt; Egil Myhr; Elisabeth Reed and Tore Hastein. *IN VITRO* ANTIMICROBIAL ACTIVITY OF SARAFLOXACIN AGAINST CLINICAL ISOLATES OF BACTERIA PATHOGENIC TO FISH. *J. Aquat. Anim. Health* 3(4):235-241. 1991. FR 37(2)

[Dep. Pharmacol. & Toxicol., Norwegian Coll. Vet. Med., P.O. Box 8146 Dep., N-0033 Oslo 1, Norway]

BACTERIAL DISEASES (Continued)

92-003149 Matsuyama, Hiroko; Remy E. P. Mangindaan and Tomoki Yano. PROTECTIVE EFFECT OF SCHIZOPHYLLAN AND SCLEROGLUCAN AGAINST *STREPTOCOCCUS*SP. INFECTION IN YELLOWTAIL (*SERIOLA QUINQUERADIATA*). *Aquaculture* 101(3/4):197-203. 1992. FR 37(2)

[Lab. Fish. Chem., Fac. Agric., Kyushu Univ., Fukuoka 812, Japan]

92-003150 Michel, C. and B. Faivre. CARRIER STATE IN FURUNCULOSIS: SECONDARY INFECTION OF TROUT WITH DIFFERENT *AEROMONAS SALMONICIDA* STRAINS RESULTS IN ADVANTAGE FOR THE PRIMARILY HARBOURED ONE. *J. Fish Dis.* 14(5):571-576. 1991. FR 37(2)

[Inst. Rech. Agron., Lab. Virol. & Immunol. Mol., Cent. Rech. Jouy-en-Josas, 78352, Jouy-en-Josas Cedex, France] *Oncorhynchus mykiss.*

92-003151 Michel, Christian; Rosana Gonzalez and Stratis Avrameas. [ANTIBACTERIAL RESISTANCE IN RAINBOW TROUT AFTER INJECTION OF LIQUID CONTAINING ASCITES (WITH IgM AT LEAST PARTIALLY REMOVED) AND NATURAL MONOCLONAL ANTIBODIES OF HUMAN ORIGIN.] *C. R. Acad. Sci. Ser. III Sci. Vie* 314(2):43-48. 1992. In French with English summ. FR 37(2)

[I.N.R.A., Unite Virol. & Immunol. Mol., C.R.J.J., 78352 Jouy-en-Josas Cedex, France] *Oncorhynchus mykiss.*

92-003152 Mqolomba, Thobekile N. and J. A. Plumb. LONGEVITY OF *EDWARDSIELLA ICTALURI* IN THE ORGANS OF EXPERIMENTALLY INFECTED CHANNEL CATFISH, *ICTALURUS PUNCTATUS. Aquaculture* 101(1/2):1-6. 1992. FR 37(2)

[Plumb: Dep. Fish. & Allied Aquacult. & Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849]

92-003153 Nikl, L.; L. J. Albright and T. P. T. Evelyn. INFLUENCE OF SEVEN IMMUNOSTIMULANTS ON THE IMMUNE RESPONSE OF COHO SALMON TO *AEROMONAS SALMONICIDA. Dis. Aquat. Org.* 12(1):7-12. 1991. FR 37(2)

[Dep. Biol. Sci., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6] *Oncorhynchus kisutch.*

92-003154 Obach, A. and F. Baudin Laurencin. VACCINATION OF RAINBOW TROUT *ONCORHYNCHUS MYKISS* AGAINST THE VISCERAL FORM OF COLDWATER DISEASE. *Dis. Aquat. Org.* 12(1):13-15. 1991. FR 37(2)

[Lab. Pathol. Anim. Aquat., Cent. Natl. Etudes Vet. Alimentaires, BP 70, F-29280 Plouzane, France]

92-003155 Ourth, Donald D.; Vicki D. Ratts and Nick C. Parker. BACTERICIDAL COMPLEMENT ACTIVITY AND CONCENTRATIONS OF IMMUNOGLOBULIN M, TRANSFERRIN, AND PROTEIN AT DIFFERENT AGES OF CHANNEL CATFISH. *J. Aquat. Anim. Health* 3(4):274-280. 1991. FR 37(2)

[Dep. Biol., Memphis State Univ., Memphis, TN 38152] *Ictalurus punctatus.*

92-003156 Pascho, Ronald J.; Diane G. Elliott and Jonathan M. Streufert. BROOD STOCK SEGREGATION OF SPRING CHINOOK SALMON *ONCORHYNCHUS TSHAWYTSCHA*BY USE OF THE ENZYME-LINKED IMMUNOSORBENT ASSAY (ELISA) AND THE FLUORESCENT ANTIBODY TECHNIQUE (FAT) AFFECTS THE PREVALENCE AND LEVELS OF *RENIBACTERIUM SALMONINARUM* INFECTION IN PROGENY. *Dis. Aquat. Org.* 12(1):25-40. 1991. FR 37(2)

[Natl. Fish. Res. Center.-Seattle, Bldg. 204, Naval Stn. Puget Sound, Seattle, WA 98115]

92-003157 Sakai, Masahiro; Shizuo Atsuta and Masanori Kobayashi. DETECTION OF *RENIBACTERIUM SALMONINARUM* ANTIGEN IN MIGRATING ADULT CHUM SALMON *(ONCORHYNCHUS KETA)* IN JAPAN. *J. Wildl. Dis.* 28(1):110-112. 1992. FR 37(2)

[School Fish. Sci., Kitasato Univ. Sanriku, Iwate, Japan]

92-003158 Sami, S.; T. Fischer-Scherl; R. W. Hoffmann and C. Pfeil-Putzien. IMMUNE COMPLEX-MEDIATED GLOMERULONEPHRITIS ASSOCIATED WITH BACTERIAL KIDNEY DISEASE IN THE RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Vet. Pathol.* 29(2):169-174. 1992. FR 37(2)

[Inst. Zool. & Hydrobiol., Fac. Vet. Med., Munich Univ., Munich, Germany]

92-003159 Sanders, J. E.; J. J. Long; C. K. Arakawa; J. L. Bartholomew and J. S. Rohovec. PREVALENCE OF *RENIBACTERIUM SALMONINARUM* AMONG DOWNSTREAM- MIGRATING SALMONIDS IN THE COLUMBIA RIVER. *J. Aquat. Anim. Health* 4(1):72-75. 1992. FR 37(2)

[Rohovec: Dep. Microbiol., Oreg. State Univ., Nash Hall 220, Corvallis 97331-3804] *Oncorhynchus tshawytscha, O. kisutch,* and *O. mykiss* in North America.

92-003160 Santos, Ysabel; Isabel Bandin; Teresa P. Nieto; Juan L. Barja; Alicia E. Toranzo and Anthony E. Ellis. CELL-SURFACE-ASSOCIATED PROPERTIES OF FISH PATHOGENIC BACTERIA. *J. Aquat. Anim. Health* 3(4):297-301. 1991. FR 37(2)

[Dep. Microbiol. & Parasitol., Fac. Biol., Univ. Santiago, Santiago de Compostela 15706, Spain] *Oncorhynchus mykiss.*

BACTERIAL DISEASES (Continued)

92-003161 Scarpa, John; Delbert M. Gatlin III and Donald H. Lewis. EFFECTS OF DIETARY ZINC AND CALCIUM ON SELECT IMMUNE FUNCTIONS OF CHANNEL CATFISH. *J. Aquat. Anim. Health* 4(1):24-31. 1992. FR 37(2)

[Gatlin: Dep. Wildl. & Fish. Sci., Tex. A&M Univ. Syst., College Station 77843] *Ictalurus punctatus.*

92-003162 Speare, David J.; John Brocklebank; Neil MacNair; Robert Claveau; Steve Backman; E. Pauline Ewan and Kathryn A. Bernard. GRANULOMATOUS NEPHRITIS ASSOCIATED WITH *RHODOCOCCUS* SP. INFECTION IN ATLANTIC SALMON (*SALMO SALAR*). *Can. Vet. J.* 33(3):192. 1992. FR 37(2)

[Dep. Pathol. & Microbiol., Atl. Vet. Coll., Charlottetown, PI, Canada C1A 4P3]

92-003163 Stanley, Lisa Ann. CHARACTERISTICS OF PATHOGENIC MECHANISMS OF *EDWARDSIELLA ICTALURI* IN THE CHANNEL CATFISH, *ICTALURUS PUNCTATUS*. *Ph.D. dissertation, Clemson Univ.* 95p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4026-4027. 1992. Order No. DA9203158. FR 37(2)

92-003164 Taksdal, T.; E. Myhr; M. Heum and L. J. Reitan. [*EDWARDSIELLA TARDA* INFECTION IN EELS. FIRST REPORT IN NORWAY.] *Nor. Veterinaertidsskr.* 101(8-9):675-679. 1989. In Norwegian with English summ. From Anim. Dis. Occurrence 12(1):867. 1991. FR 37(2)

[Veterinaerinst., pb. 8156 Dep., 0033 Oslo 1, Norway] *Anguilla anguilla.*

92-003165 Teuber, C.; G. Riffart; T. Donoso; M. V. Vial; M. T. Gebauer and J. Rohovec. [PRESENCE AND PATHOGENIC CAPACITY OF *VIBRIO ANGUILLARUM* (CANESTRINI) IN SOUTHERN CHILEAN WATERS.] *Medio Ambiente* 11(1):33-41. 1990. In Spanish with English summ. FR 37(2)

[Dep. Acuicult. & Recursos Acuat., Inst. Profesional Osorno, Casilla 933, Osorno, Chile] *Oncorhynchus kisutch.*

92-003166 Wakabayashi, H.; M. Horiuchi; T. Bunya and G. Hoshiai. [OUTBREAKS OF COLD-WATER DISEASE IN COHO SALMON IN JAPAN.] *Fish Pathol.* 26(4):211-212. 1991. In Japanese. FR 37(2)

[Tokyo Univ. Fish., Tokyo, Japan] *Oncorhynchus kisutch.*

92-003167 Walls, Jerry G. COLUMNARIS: THE MOST COMMON AQUARIUM FISH DISEASE? *Trop. Fish Hobbyist* 40(7):82-84, 86, 88-89. 1992. FR 37(2)

92-003168 Waterstrat, P. R.; J. Brazil and A. J. Ainsworth. USE OF AN ELISA-BASED ASSAY FOR THE DETECTION OF ANTIBODY-SECRETING CELLS IN CHANNEL CATFISH, *ICTALURUS PUNCTATUS* (RAFINESQUE). *J. Fish Dis.* 14(6):669-675. 1991. FR 37(2)

[Coll. Vet. Med., Drawer V, Miss. State Univ., Mississippi State 30762]

92-003169 Williams, Daniel J. and Ossi V. Lindqvist. CIRCULATING ANTIBODIES AGAINST *VIBRIO ANGUILLARUM* 01 ANTIGEN FROM RAINBOW TROUT FARMED IN THE BALTIC. *Aquaculture* 100(1-3):331. 1992. Poster abstract only. FR 37(2)

[Dep. Appl. Zool., Univ. Kuopio, Kuopio, Finland] *Oncorhynchus mykiss.*

92-003170 Wise, D. J.; T. E. Schwedler; V. S. Blazer; D. M. Gatlin and J. R. Tomasso. EFFECT OF VITAMIN E ON THE IMMUNE RESPONSE TO *EDWARDSIELLA ICTALURI* IN CHANNEL CATFISH (*ICTALURUS PUNCTATUS*). *J. World Aquacult. Soc.* 22(3):65A-66A. 1991. Abstract only. FR 37(2)

[Dep. Aquacult., Fish., & Wildl., Clemson Univ., Clemson, SC 29634-0362]

92-003171 Yano, T.; H. Matsuyama and R. E. P. Mangindaan. POLYSACCHARIDE-INDUCED PROTECTION OF CARP, *CYPRINUS CARPIO* L., AGAINST BACTERIAL INFECTION. *J. Fish Dis.* 14(5):577-582. 1991. FR 37(2)

[Lab. Fish. Chem., Fac. Agric., Kyushu Univ., Fukuoka 812, Japan]

FUNGAL DISEASES

92-003172 Lannan, C. N.; S. A. Ewing and J. L. Fryer. A FLUORESCENT ANTIBODY TEST FOR DETECTION OF THE RICKETTSIA CAUSING DISEASE IN CHILEAN SALMONIDS. *J. Aquat. Anim. Health* 3(4):229-234. 1991. FR 37(2)

[Fryer: Dep. Microbiol., Oreg. State Univ., Nash Hall 220, Corvallis 97331-3804] *Oncorhynchus tshawytscha.*

PROTOZOAN DISEASES

92-003173 Atsuta, S.; M. Sakai and M. Kobayashi. OBSERVATIONS ON A MYXOSPOREAN IN THE KIDNEYS OF MASU SALMON, *ONCORHYNCHUS MASOU*. *Physiol. Ecol. Jpn.* Spec. Vol. 1. p. 599-604. 1989. From Protozool. Abstr. 15(11-12):4490. 1991. FR 37(2)

[School Fish. Sci., Kitasato Univ., Okkirai, Sanriku, Iwate 022-01, Japan]

92-003174 Bucke, D.; S. W. Feist and R. S. Clifton-Hadley. THE OCCURRENCE OF PROLIFERATIVE KIDNEY DISEASE (PKD) IN CULTURED AND WILD FISH: FURTHER INVESTIGATIONS. *J. Fish Dis.* 14(5):583-588. 1991. FR 37(2)

[Minist. Agric., Fish. & Food, Fish Dis. Lab., 14 Albany Rd., Grandby Ind. Estate Weymouth, Dorset DT4 8UB, England] *Salvelinus alpinus, Oncorhynchus mykiss, Salmo trutta, S. salar, Thymallus thymallus,* and *Esox lucius.*

PROTOZOAN DISEASES (Continued)

92-003175 Bunton, T. E. and S. L. Poynton. *KUDOA* SP. (MYXOSPOREA, MULTIVALVULIDA) INFECTION IN JUVENILE WHITE PERCH, *MORONE AMERICANA* (GMELIN): HISTOPATHOLOGY AND SPORE MORPHOLOGY. *J. Fish Dis.* 14(5):589-594. 1991. FR 37(2)

[Poynton: Div. Comp. Med., Johns Hopkins Univ., School Med., 720 Rutland Ave., Baltimore, MD 21205]

92-003176 Burtle, G. J.; L. R. Harrison and E. L. Styer. DETECTION OF A TRIACTINOMYXID MYXOZOAN IN AN OLIGOCHAETE FROM PONDS WITH PROLIFERATIVE GILL DISEASE IN CHANNEL CATFISH. *J. Aquat. Anim. Health* 3(4):281-287. 1991. FR 37(2)

[Dep. Anim. Sci., Coastal Plain Exp. Stn., Univ. Ga., P.O. Box 748, Tifton 31793] *Ictalurus punctatus* in Georgia.

92-003177 Eiras, J. C. and A. J. Davies. *HAEMOGREGARINA BIGEMINA* LAVERAN & MESNIL, 1901 (PROTOZOA, APICOMPLEXA) FROM *BLENNIUS PHOLIS* L. (OSTEICHTHYES, BLENNIIDAE): AN INVESTIGATION OF SEASONALITY IN PORTUGAL. *J. Fish Dis.* 14(6):683-687. 1991. FR 37(2)

[Inst. Zool., Fac. Cienc., Univ. Porto, 4000 Porto, Portugal]

92-003178 El-Matbouli, M. and R. W. Hoffmann. EFFECTS OF FREEZING, AGING, AND PASSAGE THROUGH THE ALIMENTARY CANAL OF PREDATORY ANIMALS ON THE VIABILITY OF *MYXOBOLUS CEREBRALIS* SPORES. *J. Aquat. Anim. Health* 3(4):260-262. 1991. FR 37(2)

[Inst. Zool. & Hydrobiol., Univ. Munich, Kaulbachstr. 37, 8000 Munich 22, Germany] *Oncorhynchus mykiss* and *Esox lucius.*

92-003179 Gravois, M. G. PROLIFERATIVE GILL DISEASE: AN INCREASING PROBLEM IN CHANNEL CATFISH CULTURE. *Aquacult. Mag.* 18(2):72-73. 1992. FR 37(2)

[Fish Farming Exp. Lab., U.S. Fish & Wildl. Serv., Stuttgart, AR 72160] *Ictalurus punctatus.*

92-003180 Jones, Simon R. M. and Patrick T. K. Woo. VECTOR SPECIFICITY OF *TRYPANOSOMA CATOSTOMI* AND ITS INFECTIVITY TO FRESHWATER FISHES. *J. Parasitol.* 78(1):87-92. 1992. FR 37(2)

[Woo: Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Oncorhynchus mykiss, Catostomus commersoni, Amia calva, Anguilla rostrata, Ictalurus nebulosus* and *Perca flavescens* in Canada.

92-003181 Ling, K. H.; Y. M. Sin and T. J. Lam. A NEW APPROACH TO CONTROLLING ICHTHYOPHTHIRIASIS IN A CLOSED CULTURE SYSTEM OF FRESHWATER ORNAMENTAL FISH. *J. Fish Dis.* 14(5):595-598. 1991. FR 37(2)

[Sin: Fac. Sci., Natl. Univ. Singapore, Lower Kent Ridge Rd., Singapore 0511] *Carassius auratus, Capoeta tetrazona* and *Brachydanio rerio.*

92-003182 Lom, Jiri; Alan W. Pike and Iva Dykova. *MYXOBOLUS SANDRAE* REUSS, 1906, THE AGENT OF VERTEBRAL COLUMN DEFORMITIES OF PERCH *PERCA FLUVIATILIS* IN NORTHEAST SCOTLAND. *Dis. Aquat. Org.* 12(1):49-53. 1991. FR37(2)

[Inst. Parasitol., Czechoslovak Acad. Sci., Branisovska 31, 370 05 Ceske Budejovice, Czechoslovakia]

92-003183 Markiw, Maria E. EXPERIMENTALLY INDUCED WHIRLING DISEASE II. DETERMINATION OF LONGEVITY OF THE INFECTIVE TRIACTINOMYXON STAGE OF *MYXOBOLUS CEREBRALIS* BY VITAL STAINING. *J. Aquat. Anim. Health* 4(1):44-47. 1992. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish Health Res. Lab., Box 700, Kearneysville, WV 25430] *Oncorhynchus mykiss.*

92-003184 Markiw, Maria E. EXPERIMENTALLY INDUCED WHIRLING DISEASE I. DOSE RESPONSE OF FRY AND ADULTS OF RAINBOW TROUT EXPOSED TO THE TRIACTIMYXON STAGE OF *MYXOBOLUS CEREBRALIS. J. Aquat. Anim. Health* 4(1):40-43. 1992. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish Health Res. Lab., Box 700, Kearneysville, WV 25430] *Oncorhynchus mykiss.*

92-003185 Noga, Edward J.; Stephen A. Smith and Jan H. Landsberg. AMYLOODINIOSIS IN CULTURED HYBRID STRIPED BASS (*MORONE SAXATILIS* X *M. CHRYSOPS*) IN NORTH CAROLINA. *J. Aquat. Anim. Health* 3(4):294-297. 1991. FR 37(2)

[Dep. Companion Anim. & Special Species Med., Coll. Vet. Med., N.C. State Univ., 4700 Hillsborough St., Raleigh 27606]

92-003186 Shanavas, K. R. *TRYPANOSOMA PUNCTATI* HASAN AND QASIM, 1962 FROM *CHANNA PUNCTATUS* BLOCH IN KERALA, INDIA, WITH OBSERVATIONS ON ITS VECTOR-PHASE DEVELOPMENT AND TRANSMISSION. *Arch. Protistenkd.* 140(2-3):201-208. 1991. From Protozool. Abstr. 16(1):67. 1992. FR 37(2)

[Anada Bhavan, Muttappalam, Perunguzhi, P.O. Chrayinkil, Trivandrum, Kerala-695 305, India]

92-003187 Sin, Y. M.; K. H. Ling and T. J. Lam. PROTECTION AGAINST VELVET DISEASE IN GOLDFISH RECOVERED FROM ICHTHYOPHTHIRIASIS. *Aquaculture*102(1/2):187-191. 1992. FR 37(2)

[Dep. Zool., Natl. Univ. Singapore, Lower Kent Ridge Rd., Singapore 0511] *Carassius auratus.*

PROTOZOAN DISEASES (Continued)

92-003188 Siti, A. Z. and L. A. Rokiah. BEHAVIOURAL AND MORPHOLOGICAL CHARACTERISTICS IN *PUNTIUS GONIONOTUS* (BLEEKER) WITH *PISCINOODINIUM PILLULARE* INFESTATION. *In: Maximising Livestock Productivity Proceedings of the Annual Conference Malaysian Society of Animal Production, 20-30* March, 1988. J. Vadiveloo and C. C. Wong, editors. No. 11. p. 69-72. 1988. From Protozool. Abstr. 16(1):66. 1992. FR 37(2)

[Freshwater Fish. Cent., 75350 Batu Berendam, Melaka, Malaysia]

92-003189 Styer, E. L.; L. R. Harrison and G. J. Burtle. EXPERIMENTAL PRODUCTION OF PROLIFERATIVE GILL DISEASE IN CHANNEL CATFISH EXPOSED TO A MYXOZOAN-INFECTED OLIGOCHAETE, *DERO DIGITATA*. *J. Aquat. Anim. Health* 3(4):288-291. 1991. FR 37(2)

[Vet. Diagnostic & Invest. Lab., Univ. Ga., P.O. Box 1389, Tifton 31793] *Ictalurus punctatus*.

92-003190 Untergasser, Dieter. ARE OUR DISCUS POPULATIONS THREATENED BY A GIANT FLAGELLATE? *Trop. Fish Hobbyist* 40(1):26-28, 31-32. 1991. FR 37(2)

Symphysodon.

92-003191 Urawa, S. SEASONAL OCCURRENCE OF *MICROSPORIDIUM TAKEDAI* (MICROSPORIDA) INFECTION IN MASU SALMON, *ONCORHYNCHUS MASOU*, FROM THE CHITOSE RIVER. *Physiol. Ecol. Jpn.* Spec. Vol. 1. p. 587-598. 1989. From Protozool. Abstr. 15(11-12):4489. 1991. FR 37(2)

[Hokkaido Salmon Hatchery, Fish. Agency Japan, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062, Japan]

92-003192 Vethaak, D. and J. van der Meer. FISH DISEASE MONITORING IN THE DUTCH PART OF THE NORTH SEA IN RELATION TO THE DUMPING OF WASTE FROM TITANIUM DIOXIDE PRODUCTION. *Chem. Ecol.* 5(3):149-170. 1991. From Protozool. Abstr. 15(10):4046. 1991. FR 37(2)

Limanda limanda in the Netherlands.

92-003193 Wahli, T.; W. Meier and M. Schmitt. AFFINITY OF *ICHTHYOPHTHIRIUS MULTIFILIIS* THERONTS TO LIGHT AND/OR FISH. *J. Appl. Ichthyol.* 7(4):244-248. 1991. FR 37(2)

[Untersuchungsstelle Fischkrankheiten, Inst. Tierpathol., Univ. Bern, Langgasstr. 122, CH-3012 Bern, Switzerland] *Oncorhynchus mykiss* and *Salmo trutta*.

92-003194 Walter, Gunther; Jurgen Sedlaczek and Klaus Odening. [AGRIPARASITOLOGY ASPECTS IN AQUATIC ECOSYSTEMS FOR FISH PRODUCTION.] *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2489-2492. 1989. In German with English summ. FR37(2)

[Forschungsstelle Wirbeltierforschung, Alfred-Kowalke-Str. 17, D-1136 Berlin, Germany] *Cyprinus carpio*.

92-003195 Whitaker, D. J. and Michael L. Kent. MYXOSPOREAN *KUDOA THYRSITES*: A CAUSE OF SOFT FLESH IN FARM-REARED ATLANTIC SALMON. *J. Aquat. Anim. Health* 3(4):291-294. 1991. FR 37(2)

[Dep. Fish. & Oceans, Biol. Sci. Branch, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6] *Salmo salar* in Canada.

92-003196 Wierzbicka, Jadwiga. AN ANALYSIS OF PARASITIC FAUNA OF GREENLAND HALIBUT, *REINHARDTIUS HIPPOGLOSSOIDES* (WALBAUM, 1792) IN DIFFERENT AGE GROUPS. *Acta Ichthyol. Piscatoria* 21(1):31-41. 1991. In English with Polish summ. FR 37(2)

[Inst. Ichtiol., Kazimierza Krolewicza 4, 71-550 Szczecin, Poland]

92-003197 Woo, Patrick T. K. and Philip T. Thomas. POLYPEPTIDE AND ANTIGEN PROFILES OF *CRYPTOBIA SALMOSITICA*, *C. BULLOCKI* AND *C. CATOSTOMI* (KINETOPLASTIDA: SARCOMASTIGOPHORA) ISOLATED FROM FISHES. *Dis. Aquat. Org.* 11(3):201-205. 1991. FR 37(2)

[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

VIRAL DISEASES

92-003198 Dopazo, C. P.; B. Lupiani; C. Rivas; B. Novoa; J. L. Barja and A. E. Toranzo. INFLUENCE OF THE TEMPERATURE AND CELL LINE ON THE ADSORPTION AND REPLICATION OF FIVE FISH ROTAVIRUSES. *Fish Pathol.* 26(4):169-175. 1991. In English with Japanese summ. FR 37(2)

[Dep. Microbiol. & Parasitol., Fac. Biol., Univ. Santiago, Santiago Compostela 15706, Spain]

92-003199 Dorson, Michel; Bernard Chevassus and Corinne Torhy. COMPARATIVE SUSCEPTIBILITY OF THREE SPECIES OF CHAR AND OF RAINBOW TROUT X CHAR TRIPLOID HYBRIDS TO SEVERAL PATHOGENIC SALMONID VIRUSES. *Dis. Aquat. Org.* 11(3):217-224. 1991. FR 37(2)

[Unite Virus Poissons, Lab. Virol. & Immunol. Mol., INRA, F-78352 Jouy-en-Josas Cedex, France] *Salvelinus namaycush*, *S. fontinalis*, *S. alpinus*, *Oncorhynchus mykiss*, and *O. kisutch*.

92-003200 Eaton, W. D.; W. H. Wingfield and R. P. Hedrick. COMPARISON OF THE DNA HOMOLOGIES OF FIVE SALMONID HERPESVIRUSES. *Fish Pathol.* 26(4):183-187. 1991. In English with Japanese summ. FR 37(2)

[Malaspina Coll., 900 Fifth St., Nanaimo, BC, Canada V9R 5S5] *Oncorhynchus tshawytscha*.

VIRAL DISEASES (Continued)

92-003201 Estepa, A. and J. M. Coll. INFECTION OF MITOGEN-STIMULATED TROUT LEUCOCYTES WITH SALMONID VIRUSES. *J. Fish Dis.* 14(5):555-562. 1991. FR 37(2)

[Coll: Dep. Sanidad Anim., INIA-CIT, Embajadores 68, 28012 Madrid, Spain] *Oncorhynchus mykiss.*

92-003202 Haney, D. C.; D. A. Hursh; M. C. Mix and J. R. Winton. PHYSIOLOGICAL AND HEMATOLOGICAL CHANGES IN CHUM SALMON ARTIFICIALLY INFECTED WITH ERYTHROCYTIC NECROSIS VIRUS. *J. Aquat. Anim. Health* 4(1):48-57. 1992. FR 37(2)

[Winton: U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent., Bldg. 204, Naval Stn., Seattle, WA 98115] *Oncorhynchus keta.*

92-003203 Hyatt, A. D.; B. T. Eaton; S. Hengstberger and G. Russel. EPIZOOTIC HAEMATOPOIETIC NECROSIS VIRUS: DETECTION BY ELISA, IMMUNOHISTOCHEMISTRY AND IMMUNOELECTRON-MICROSCOPY. *J. Fish Dis.* 14(6):605-617. 1991. FR 37(2)

[Australian Anim. Health Lab., C.S.I.R.O., P.O. Bag 24, Geelong, Vic. 3220, Australia] *Oncorhynchus mykiss* and *Perca fluviatilis.*

92-003204 Inglis, V. and R. H. Richards. THE *IN VITRO* SUSCEPTIBILITY OF *AEROMONAS SALMONICIDA* AND OTHER FISH-PATHOGENIC BACTERIA TO 29 ANTIMICROBIAL AGENTS. *J. Fish Dis.* 14(6):641-650. 1991. FR 37(2)

[Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland]

92-003205 Inouye, Kiyoshi; Fumio Ikeya; Takayoshi Yamazaki and Takeshi Hara. [VIRUCIDAL ACTIVITIES OF VARIOUS GERMICIDES TO INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS (IHNV).] *Fish Pathol.* 26(4):189-194. 1991. In Japanese with English summ. FR 37(2)

[Natl. Res. Inst. Aquacult., Tamaki-cho, Watarai-gun, Mie 519-04, Japan]

92-003206 Inouye, Kiyoshi; Fumio Ikeya; Takayoshi Yamazaki and Takeshi Hara. [VIRUCIDAL ACTIVITIES OF INVERT SOAPS TO IPNV AND IHNV.] *Fish Pathol.* 26(4):195-200. 1991. In Japanese with English summ. FR 37(2)

[Natl. Res. Inst. Aquacult., Tamaki-cho, Watarai-gun, Mie 519-04, Japan]

92-003207 Maheshkumar, S.; Sagar M. Goyal and Philip P. Economon. EVALUATION OF A CONCENTRATION PROCEDURE TO DETECT INFECTIOUS PANCREATIC NECROSIS VIRUS IN WATER. *J. Aquat. Anim. Health* 4(1):58-62. 1992. FR 37(2)

[Goyal: Dep. Vet. Diagnostic Invest., Coll. Vet. Med., Univ. Minn., St. Paul 55108] *Oncorhynchus mykiss.*

92-003208 Mori, Koh-ichiro; Toshihiro Nakai; Motoharu Nagahara; Kiyokuni Muroga; Takayuki Mekuchi and Tsuyoshi Kanno. A VIRAL DISEASE IN HATCHERY-REARED LARVAE AND JUVENILES OF REDSPOTTED GROUPER. *Fish Pathol.* 26(4):209-210. 1991. In English with Japanese summ. FR 37(2)

[Fac. Appl. Biol. Sci., Hiroshima Univ., Hiroshima, Japan] *Epinephelus akaara.*

92-003209 Mortensen, S. H.; B. Hjeltnes; O. Rodseth; J. K. Krogsrud and K. E. Christie. INFECTIOUS PANCREATIC NECROSIS VIRUS, SEROTYPE N1, ISOLATED FROM NORWEGIAN HALIBUT (*HIPPOGLOSSUS HIPPOGLOSSUS*), TURBOT (*SCOPTHALMUS MAXIMUS*) AND SCALLOPS (*PECTEN MAXIMUS*). *Bull. Eur. Assoc. Fish Pathol.* 10(2):42-43. 1990. From Anim. Dis. Occurrence 12(1):881. 1991. FR 37(2)

[Inst. Mar. Res., P. Box 1870, 5024 Bergen-Nordnes, Norway]

92-003210 Rodriguez Saint-Jean, S.; Ma. Pilar Vilas Minondo; M. Angel Palacios and S. Perez Prieto. DETECTION OF INFECTIOUS PANCREATIC NECROSIS IN A CARRIER POPULATION OF RAINBOW TROUT, *ONCORHYNCHUS MYKISS* (RICHARDSON), BY FLOW CYTOMETRY. *J. Fish Dis.* 14(5):545-553. 1991. FR 37(2)

[Pilar Vilas Minondo: Cent. Invest. Biol., C/Velazquez 144, 28006 Madrid, Spain]

92-003211 Sanjuan, J. L. and E. Yus. CHARACTERISTICS OF BIRNAVIRUSES ISOLATED FROM FISH IN SPAIN. *Aquaculture* 100(1-3):331. 1992. Poster abstract only. FR 37(2)

[Lab. Fish Pathol., Fac. Vet. Sci., Santiago Univ., Santiago, Spain] *Salmo trutta, S. salar,* and *Oncorhynchus mykiss.*

92-003212 Sano, Natsumi; Ryo Honda; Hideo Fukuda and Tokuo Sano. *HERPESVIRUS CYPRINI*: RESTRICTION ENDONUCLEASE CLEAVAGE PROFILES OF THE VIRAL DNA. *Fish Pathol.* 26(4):207-208. 1991. In English with Japanese summ. FR 37(2)

[Lab. Aquat. Pathol., Dep. Aquat. Biosci., Tokyo Univ. Fish., Tokyo, Japan]

92-003213 Sano, T.; N. Morita; N. Shima and M. Akimoto. *HERPESVIRUS CYPRINI*: LETHALITY AND ONCOGENICITY. *J. Fish Dis.* 14(5):533-543. 1991. FR 37(2)

[Lab. Aquat. Pathol., Dep. Aquat. Biosci., Tokyo Univ. Fish., 4-5-7 Konan, Minato-ku, Tokyo 108, Japan] *Cyprinus carpio.*

OTHER DISEASES AND PARASITES

92-003214 Amin, Omar M. and Richard A. Heckmann. DESCRIPTION AND PATHOLOGY OF *NEOECHINORHYNCHUS IDAHOENSIS* N. SP. (ACANTHOCEPHALA: NEOECHINORHYNCHIDAE) IN *CATOSTOMUS COLUMBIANUS* FROM IDAHO. *J. Parasitol.* 78(1):34-39. 1992. FR 37(2)
[Dep. Biol. Sci., Univ. Wis.-Parkside, Box 2000, Kenosha 53141]

92-003215 Amin, Omar M. and Mary Gunset. THE PATTERN OF GIANT NUCLEI IN *NEOECHINORHYNCHUS RUTILI* (ACANTHOCEPHALA: NEOECHINORHYNCHIDAE). *Trans. Am. Microsc. Soc.* 111(1):65-69. 1992. FR 37(2)
[Inst. Parasitic Dis., P.O. Box 0515, Racine, WI 53401-0515] *Cyprinus carpio* in Czechoslovakia.

92-003216 Amin, Omar M. CESTODA FROM LAKE FISHES IN WISCONSIN: THE ECOLOGY AND INTERSPECIFIC RELATIONSHIPS OF BOTHRIOCEPHALID CESTODES IN WALLEYE, *STIZOSTEDION VITREUM*. *J. Helminthol. Soc. Wash.* 59(1):76-82. 1992. FR 37(2)
[Dep. Biol. Sci., Univ. Wis.-Parkside, Box 2000, Kenosha 53141] *Stizostedion vitreum* and *Lepomis cyanellus*.

92-003217 Amin, Omar M. REDESCRIPTION OF *HEBESOMA VIOLENTUM* VAN CLEAVE, 1928 (ACANTHOCEPHALA: NEOECHINORHYNCHIDAE). *J. Parasitol.* 78(1):30-33. 1992. FR 37(2)
[Dep. Biol. Sci., Univ. Wis.-Parkside, Box 2000, Kenosha 53141] *Siniperca chuantsi* and *Cottus gobio*.

92-003218 Andersen, K. I. and E. T. Valtonen. SEGREGATION AND CO-OCCURRENCE OF LARVAL CESTODES IN FRESHWATER FISHES IN THE BOTHNIAN BAY, FINLAND. *Parasitology* 104(1):161-168. 1992. FR 37(2)
[Zool. Mus., Univ. Oslo, Norway] *Gasterosteus aculeatus, Esox lucius, Lota lota, Salmo salar, S. trutta, Zoarces viviparus, Perca fluviatilis, Gymnocephalus cernuus* and *Pungitius pungitius*.

92-003219 Bauer, G.; S. Hochwald and W. Silkenat. SPATIAL DISTRIBUTION OF FRESHWATER MUSSELS: THE ROLE OF HOST FISH AND METABOLIC RATE. *Freshwater Biol.* 26(3):377-386. 1991. FR 37(2)
[Dep. Anim. Ecol., Univ. Bayreuth, D-8580 Bayreuth, Germany] *Salmo trutta* in Germany.

92-003220 Brant Moreira, Narcisa Imaculada; Carmen Lucia de Oliveira and Helio Martins de Araujo Costa. A NEW HELMINTH PARASITE OF FISH: *SPIROCAMALLANUS FREITASI* SP. N. (NEMATODA-CAMALLANIDAE). *Mem. Inst. Oswaldo Cruz Rio J.* 86(4):429-431. 1991. FR 37(2)
[Dep. Parasitol., Inst. Cienc. Biol., Univ. Fed. Minas Gerais, C.P. 2486, 31270 Belo Horizonte, MG, Brazil] *Bergiaria westermanni, Pimelodus*, and *P. maculatus* in Brazil.

92-003221 Bruno, D. W.; A. H. McVicar and C. O. Fraser. MULTIPLE LIPOMA IN THE COMMON DAB, *LIMANDA LIMANDA* L. *J. Appl. Ichthyol.* 7(4):238-243. 1991. In English with German and French summ. FR 37(2)
[Scottish off. Agric. & Fish. Dep., Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8DB, Scotland]

92-003222 Buchmann, K.; L. O. Pedersen and J. Glamann. HUMORAL IMMUNE RESPONSE OF EUROPEAN EEL *ANGUILLA ANGUILLA* TO A MAJOR ANTIGEN IN *ANGUILLICOLA CRASSUS* (NEMATODA). *Dis. Aquat. Org.* 12(1):55-57. 1991. FR 37(2)
[Dep. Fish Dis., Royal Vet. & Agric. Univ., 13 Bulowsvej, DK-1870 Frederiksberg C, Denmark]

92-003223 Campbell, Ronald A. A NEW DIGENETIC TREMATODE, *GIBSONIA BOREALIS* SP. N. (LEPOCREADIIDAE: LEPIDAPEDINAE), PARASITIC IN THE RATTAIL *MACROURUS BERGLAX* FROM THE FLEMISH CAP OFF NEWFOUNDLAND. *J. Helminthol. Soc. Wash.* 59(1):5-8. 1992. FR 37(2)
[Dep. Biol., Univ. Mass.-Dartmouth, North Dartmouth 02747]

92-003224 Camus, A. C. and R. E. Wolke. ATYPICAL HEPATIC VACUOLATED CELL LESION IN THE WHITE PERCH *MORONE AMERICANA*. *Dis. Aquat. Org.* 11(3):225-228. 1991. FR 37(2)
[Comp. Anim. Pathol. Lab, East Farm, Dep. Fish., Anim. & Vet. Sci., Univ. R.I., Kingston 02881-0804]

92-003225 Chisholm, Leslie A.; M. Beverley-Burton and Donald F. McAlpine. *PAUCICONFIBULA SUBSOLANA* N. SP. (MONOGENEA: MICROCOTYLIDAE) FROM *MORONE AMERICANA* (PERCIFORMES: PERCICHTHYIDAE) COLLECTED IN FRESH WATER IN NEW BRUNSWICK, CANADA. *J. Parasitol.* 77(6):901-905. 1991. FR 37(2)
[Coll. Biol. Sci., Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

92-003226 de Araujo Costa, Helio Martins; Narcisa Imaculada Brant Moreira and Carmen Lucia de Oliveira. *TRAVASSOSNEMA* GEN. N. WITH THE DESCRIPTION OF *T. TRAVASSOSI* SP. N. (DRACUNCULOIDEA, GUYANEMIDAE) PARASITE OF *ACESTRORHYNCHUS LACUSTRIS* REINHARDT, 1874 (CHARACIDAE) FROM TRES MARIAS RESERVOIR, MG, BRAZIL. *Mem. Inst. Oswaldo Cruz Rio J.* 86(4):437-439. 1991. FR 37(2)
[Dep. Parasitol., Inst. Cienc. Biol., Univ. Fed. Minas Gerais, C.P. 2486, 31270 Belo Horizonte, MG, Brazil]

92-003227 Eldon, Tony. FISHES AND PROBLEMS OF THE HEATHCOTE RIVER. *Freshwater Catch* No. 46. p. 17-18. 1991. FR 37(2)

OTHER DISEASES AND PARASITES (Continued)

92-003228 Evlanov, I. A. and S. E. Kolokolnikova. [POPULATION ECOLOGY OF THE CESTODE *CARYOPHYLLAEUS LATICEPS* (CESTODA, CARYOPHYLLIDAE) IN THE BREAM POPULATION.] *Zool. Zh.* 70(10):12-16. 1991. In Russian with English summ. FR 37(2)

[Inst. Ecol. Volga River Basin, USSR Acad. Sci., Togliatti, USSR] *Lepomis* in the USSR.

92-003229 Gerundo, N.; D. J. Alderman; R. S. Clifton-Hadley and S. W. Feist. PATHOLOGICAL EFFECTS OF REPEATED DOSES OF MALACHITE GREEN: A PRELIMINARY STUDY. *J. Fish Dis.* 14(5):521-532. 1991. FR 37(2)

[Alderman: Minist. Agric., Fish. & Food, Dir. Fish. Res., Fish Dis. Lab., The Nothe, Weymouth, Dorset DT4 8UB, England] *Oncorhynchus mykiss.*

92-003230 Haenen, O. L. M.; L. Grisez; D. De Charleroy; C. Belpaire and F. Ollevier. ARTIFICIAL INFECTION OF THE EUROPEAN EEL WITH THIRD-STAGE LARVAE OF THE NEMATODE *ANGUILLICOLA CRASSUS. J. Aquat. Anim. Health* 3(4):263-265. 1991. FR 37(2)

[Cent. Vet. Inst., P.O. Box 65, 8200 AB Lelystad, Netherlands] *Anguilla anguilla.*

92-003231 Johnsen, B. O. and A. J. Jensen. INFECTION OF ATLANTIC SALMON, *SALMO SALAR* L., BY *GYRODACTYLUS SALARIS*, MALMBERG 1957, IN THE RIVER LAKSELVA, MISVAER IN NORTHERN NORWAY. *J. Fish Biol.* 40(3):433-444. 1992. FR 37(2)

[Norwegian Inst. Nat. Res., Tungasletta 2, 7005 Trondheim, Norway]

92-003232 Kearn, Graham C. and Ian D. Whittington. A RESPONSE TO LIGHT IN AN ADULT ENCOTYLLABINE (CAPSALID) MONOGENEAN FROM THE PHARYNGEAL TOOTH PADS OF SOME MARINE TELEOST FISHES. *Int. J. Parasitol.* 22(1):119-121. 1992. FR 37(2)

[School Biol. Sci., Univ. East Anglia, Norwich NR4 7TJ, England] *Gymnocranius audleyi* and *Scolopsis monogramma.*

92-003233 Khan, R. A. TRYPANOSOME OCCURRENCE AND PREVALENCE IN THE MARINE LEECH *JOHANSSONIA ARCTICA* AND ITS HOST PREFERENCES IN THE NORTHWESTERN ATLANTIC OCEAN. *Can. J. Zool.* 69(9):2374-2380. 1991. In English with French summ. FR 37(2)

[Dep. Biol. & Mar. Sci. Res. Lab., Memorial Univ. Newfoundland, St. John's, NF, Canada A1C 5S7]

92-003234 Kirk, R. S. and J. W. Lewis. THE LABORATORY MAINTENANCE OF *SANGUINICOLA INERMIS* PLEHN, 1905 (DIGENEA: SAGUINICOLIDAE). *Parasitology* 104(1):121-127. 1992. FR 37(2)

[Dep. Biol., Royal Holloway & Bedford New Coll., Univ. London, Egham, Surrey TW20 0EX, England] *Cyprinus carpio, Carassius auratus* and *Tinca tinca.*

92-003235 Klassen, Greg. REVISION OF *HALIOTREMA* SPECIES (MONOGENEA: ANCYROCEPHALIDAE) FROM ATLANTIC BOXFISHES (TETRAODONTIFORMES: OSTRACIINAE): MORPHOLOGY, MORPHOMETRICS, AND DISTRIBUTION. *Can. J. Zool.* 69(10):2523-2539. 1991. In English with French summ. FR 37(2)

[Dep. Zool., Univ. Toronto, Toronto, ON, Canada M5S 1A1] *Acanthostracion* and *Lactophrys.*

92-003236 Kristoffersen, Roar. OCCURRENCE OF THE DIGENEAN *CRYPTOCOTYLE LINGUA* IN FARMED ARCTIC CHARR *SALVELINUS ALPINUS* AND PERIWINKLES *LITTORINA LITTOREA* SAMPLED CLOSE TO CHARR FARMS IN NORTHERN NORWAY. *Dis. Aquat. Org.* 12(1):59-65. 1991. FR 37(2)

[Dep. Aquat. Biol., Norwegian Coll. Fish. Sci., Univ. Tromso, Dramsveien 201B, N-9000 Tromso, Norway]

92-003237 Kritscher, Erich. [DESCRIPTION OF A NEW ECTO-PARASITE, *DIPLOZOON BILEKI* NOV. SPEC. (MONOGENEA, DIPLOZOIDAE) FOUND ON GILLS OF *BARBUS PLEBEJUS EUBOICUS* STEPH. (PISCES, CYPRINIDAE) FROM THE ISLAND EVVOIA.] *Ann. Naturhist. Mus. Wien Ser. B Bot. Zool.* Vol. 92. p. 251-255. 1991. In German with English summ. FR 37(2)

[Naturhist. Mus., 3. Zool. Abteilung, Burgring 7, Postfach 417, A-1014 Vienna, Austria]

92-003238 Kritscher, Erich. [INFORMATION ON THE ECTO- AND ENDOPARASITES OF *VIMBA VIMBA* (L.) (PISCES: CYPRINIDAE) IN LAKE ATTERSEE (UPPER AUSTRIA).] *Ann. Naturhist. Mus. Wien Ser. B Bot. Zool.* Vol. 92. p. 241-249. 1991. In German with English summ. FR 37(2)

[Naturhist. Mus., 3. Zool. Abteilung, Burgring 7, Postfach 417, A-1014 Vienna, Austria]

92-003239 Kritscher, Erich. [CONTRIBUTION TO THE INFORMATION ON PARASITES OF ARCTIC CHAR *SALVELINUS ALPINUS* L. (PISCES: SALMONIDAE) IN LAKE ATTERSEE (UPPER AUSTRIA).] *Ann. Naturhist. Mus. Wien Ser. B Bot. Zool.* Vol. 92. p. 257-265. 1991. In German with English summ. FR 37(2)

[Naturhist. Mus., 3. Zool. Abteilung, Evertebr. varia-Sammlung, Burgring 7, A-1014 Vienna, Austria]

92-003240 Kritsky, D. C,; W. A. Boeger and L. R. Van Every. NEOTROPICAL MONOGENOIDEA. 17. *ANACANTHORUS* MIZELLE AND PRICE, 1965 (DACTYLOGYRIDAE, ANACANTHORINAE) FROM CHARACOID FISHES OF THE CENTRAL AMAZON. *J. Helminthol. Soc. Wash.* 59(1):25-51. 1992. FR 37(2)

[Coll. Health-Related Professions, Idaho State Univ., Pocatello 83209] *Serrasalmus nattereri.*

OTHER DISEASES AND PARASITES (Continued)

92-003241 Luque, Jose Luis and Jose Iannacone. SOME MONOGENOIDEA PARASITIC ON PERUVIAN MARINE FISHES, WITH DESCRIPTION OF *ANOPLOCOTYLOIDES CHORRILLENSIS* NEW SPECIES AND NEW RECORDS. *Mem. Inst. Oswaldo Cruz Rio J.* 86(4):425-428. 1991. FR 37(2)

[Curso Pos-Grad. Parasitol. Vet., Univ. Fed. Rural Rio Janeiro, 23851 Seropedica, RJ, Brazil] *Rhinobatos planiceps, Sarda chiliensis chiliensis,* and *Callorhynchus callorynchus* in Peru.

92-003242 Macri, B.; B. Peirone and F. Guarda. [CARDIAC PATHOLOGY IN SEA FISHES.] *Atti Soc. Ital. Sci. Vet.* Vol. 42. p. 821. 1988. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 405. 1988-1990. FR 37(2)

92-003243 Matsaberidze, K. G. [A NEW SPECIES OF MONOGENEA *MARKEWITSCHIANA TRIAXONIS* SP. N. FROM NASAL FOSSAE OF FISHES.] *Zool. Zh.* 70(10):128-130. 1991. In Russian with English summ. FR 37(2)

[Inst. Zool., Georgian SSR Acad. Sci., Tbilisi, USSR] *Barbus barbus, Varicorhinus capoeta,* and *Leuciscus cephalus* in the USSR.

92-003244 McLoughlin, M. F.; S. Kennedy and D. G. Kennedy. VITAMIN E-RESPONSIVE MYOPATHY IN RAINBOW TROUT FRY (*ONCORHYNCHUS MYKISS*). *Vet. Rec.* 130(11):224-226. 1992. FR 37(2)

[Dep. Agric. Northern Ireland, Vet. Sci. Div., Stoney Rd., Stormont, Belfast BT4 3SD, Northern Ireland]

92-003245 Moller, Heino; Sabine Holst; Hans Luchtenberg and Frerk Petersen. INFECTION OF EEL *ANGUILLA ANGUILLA* FROM THE RIVER ELBE ESTUARY WITH TWO NEMATODES, *ANGUILLICOLA CRASSUS* AND *PSEUDOTERRANOVA DECIPIENS*. *Dis. Aquat. Org.* 11(3):193-199. 1991. FR 37(2)

[Inst. Meereskunde, Univ. Kiel, Dusternbrooker Weg 20, W-2300 Kiel 1, Germany]

92-003246 Moser, Mike and Janet Hsieh. BIOLOGICAL TAGS FOR STOCK SEPARATION IN PACIFIC HERRING *CLUPEA HARENGUS PALLASI* IN CALIFORNIA. *J. Parasitol.* 78(1):54-60. 1992. FR 37(2)

[Long Mar. Lab., Univ. Calif., 100 Shaffer Rd., Santa Cruz 95060]

92-003247 Nie, P. and C. R. Kennedy. OCCURRENCE OF *PHYLLODISTOMUM FOLIUM* (OLFERS) (DIGENEA) IN THE EEL, *ANGUILLA ANGUILLA* (LINNAEUS), IN A SMALL RIVER. *J. Fish Biol.* 40(3):469-470. 1992. FR 37(2)

[Inst. Hydrobiol., Acad. Sinica, Wuhan, Hubei 430072, China]

92-003248 O'Connell, Martin T. IMMUNOLOGICAL RESPONSES OF FISHES TO GLOCHIDIA OF FRESHWATER MUSSELS. *M.S. thesis, Va. Polytech. Inst. & State Univ.* 87p. 1991. FR 37(2)

Ambloplites rupestris, Cyprinus carpio, and *Carassius auratus.*

92-003249 O'Halloran, John; Jamie Carpenter; David Ogden; William E. Hogans and Maura Jansen. *ERGASILUS LABRACIS* ON ATLANTIC SALMON. *Can. Vet. J.* 33(1):75. 1992. FR 37(2)

[New Brunswick Dep. Fish. & Aquacult., 268 Milltown Blvd., St. Stephen, NB, Canada E2L 1H6] *Salmo salar.*

92-003250 Olson, Robert E.; Christopher F. Dungan and Richard A. Holt. WATER-BORNE TRANSMISSION OF *DERMOCYSTIDIUM SALMONIS* IN THE LABORATORY. *Dis. Aquat. Org.* 12(1):41-48. 1991. FR 37(2)

[Dep. Fish. & Wildl., Coastal Mar. Exp. Stn., Oreg. State Univ., Hatfield Mar. Sci. Cent., Newport 97365] *Oncorhynchus tshawytscha* and *O. gorbuscha.*

92-003251 Orecka-Grabda, Teresa. HEMATO- AND HISTOPATHOLOGICAL CHANGES IN THE WHITEFISH (*COREGONUS ALBULA* (L.)) INVADED BY METACERCARIAE OF *COTYLURUS ERRATICUS* (SYN. *ICHTHYOCOTYLURUS*) (RUDOLPHI, 1809). *Acta Ichthyol. Piscatoria* 21(1):3-19. 1991. In English with Polish summ. FR 37(2)

[Dep. Biol. & Mar. Sci., Univ. Szczecin, Szczecin, Poland]

92-003252 Ostrowski De Nunez, Margarita and Alicia Gil De Pertierra. THE LIFE HISTORY OF *ACANTHOSTOMUM GNERII* SZIDAT, 1954 (TREMATODA: ACANTHOSTOMATIDAE), FROM THE CATFISH *RHAMDIA SAPO* IN ARGENTINA. *Zool. Anz.* 227(1/2):58-71. 1991. FR 37(2)

[Dep. Cienc. Biol., Fac. Cienc. Exactas & Nat., Ciudad Univ., Pabellon II, 1428 Nunez, Buenos Aires, Argentina]

92-003253 Pellegrino, C.; M. Julini; P. P. Bertolotti and P. Ajmerito. [PARASITIC COPEPODS (*PENNELLA CRASSICORNIS*) IN SWORD-FISH: INSPECTIVE CONSIDERATIONS.] *Ind. Alimentari* 26(3):227-232. n.d. In Italian. From Ann. Fac. Med. Vet. Torino No. 32. p. 184. 1987. FR 37(2)

Xiphias gladius.

92-003254 Perera, K. M. Lakshmi. THE EFFECT OF HOST SIZE ON LARGE HAMULI LENGTH OF *KUHNIA SCOMBRI* (MONOGENEA: POLYOPISTHOCOTYLEA) FROM EDEN, NEW SOUTH WALES, AUSTRALIA. *Int. J. Parasitol.* 22(1):123-124. 1992. FR 37(2)

[Dep. Zool., Univ. New England, Armidale, N.S.W. 2351, Australia] *Scomber australasicus.*

92-003255 Prost, M. and J. Zelazny. [INFECTION WITH PARASITES OF THE GENERA *DACTYLOGYRUS* AND *GYRODACTYLUS* IN CARP FRY ON FISH FARMS IN POLAND.] *Medycyna Weter.* 46(1-3):23-24. 1990. In Polish with English summ. From Anim. Dis. Occurrence 12(1):886. 1991. FR 37(2)

[Zaklad Chorob Ryb, Wydzial Weterynaryjny, AR, ul. Akad. 12, 20-033 Lublin, Poland] *Cyprinus carpio.*

OTHER DISEASES AND PARASITES (Continued)

92-003256 Rawson, Mac V., Jr. THE SEASONAL OCCURENCE OF MONOGENETIC TREMATODES ON *LEPOMIS MACROCHIRUS* AND *MICROPTERUS SALMOIDES* IN WALTER F. GEORGE RESERVOIR. *M.S. thesis, Auburn Univ.* 60p. 1969. FR 37(2)

92-003257 Riley, Dennis Michael. PARASITES OF THE GRASS CARP (*CTENOPHARYNGODON IDELLA* VAL.) IN FLORIDA COMPARED TO THOSE OF CERTAIN NATIVE FISHES. *M.S. thesis, Auburn Univ.* 56p. 1976. FR 37(2)

Ictalurus nebulosus, I. natalis, Micropterus salmoides, Lepomis macrochirus, and *Erimyzon sucetta.*

92-003258 Robert, F. and C. Gabrion. EXPERIMENTAL APPROACH TO THE SPECIFICITY IN FIRST INTERMEDIATE HOSTS OF BOTHRIOCEPHALIDS (CESTODA, PSEUDOPHYLLIDEA) FROM MARINE FISH. *Acta Oecol. Int. J. Ecol.* 12(5):617-632. 1991. In English with French summ. FR 37(2)

[Lab. Parasitol. Comp., URA nÉ 698, CNRS, Univ. Montpellier-II, Sci. & Tech. Languedoc, Pl. E.-Bataillon, 34095 Montpellier Cedex 05, France] *Psetta maxima* and *Scophthalmus rhombus.*

92-003259 Rodger, H. D.; T. M. Murphy; E. M. Drinan and D. A. Rice. ACUTE SKELETAL MYOPATHY IN FARMED ATLANTIC SALMON *SALMO SALAR. Dis. Aquat. Org.* 12(1):17-23. 1991. FR 37(2)

[Natl. Diagnostics Cent., BioRes. Ireland, University Coll., Galway, Ireland]

92-003260 Rubec, Louise A. REDESCRIPTION OF *DICLIDOPHORA NEZUMIAE* (MONOGENEA: DICLIDOPHORIDAE) FROM *NEZUMIA BAIRDI* (MACROURIDAE), FROM THE GULF OF ST. LAWRENCE. *Can. J. Zool.* 69(9):2334-2337. 1991. In English with French summ. FR 37(2)

[6604 Sunstrip Dr., Austin, TX 78745]

92-003261 Sharp, G. J. E.; A. W. Pike and C. J. Secombes. SEQUENTIAL DEVELOPMENT OF THE IMMUNE RESPONSE IN RAINBOW TROUT [*ONCORHYNCHUS MYKISS* (WALBAUM, 1792)] TO EXPERIMENTAL PLEROCERCOID INFECTIONS OF *DIPHYLLOBOTHRIUM DENDRITICUM* (NITZSCH, 1824). *Parasitology* 104(1):169-178. 1992. FR 37(2)

[Secombes: Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, Scotland]

92-003262 Sim, Doo Saing; Myung Ae Park and Woong Nho. [CONTROL OF *DACTYLOGYRUS INVERSUS* PARASITIZING THE GILLS OF CULTURED SEA BASS, *LATEOLABRAX JAPONICUS.*] *Bull. Natl. Fish. Res. Dev. Agency* No. 45. p. 133-147. 1991. In Korean. From Korean Sci. Abstr. 23(6):2322. 1991. FR 37(2)

92-003263 Szalai, Alexander J. and Terry A. Dick. ROLE OF PREDATION AND PARASITISM IN GROWTH AND MORTALITY OF YELLOW PERCH IN DAUPHIN LAKE, MANITOBA. *Trans. Am. Fish. Soc.* 120(6):739-751. 1991. FR 37(2)

[Dep. Zool., Univ. Manitoba, Winnipeg, MB, Canada R3T 2N2] *Perca flavescens* and *Esox lucius* in Canada.

92-003264 Szalai, Alexander J.; Walter Lysack and Terry A. Dick. USE OF CONFIDENCE ELLIPSES TO DETECT EFFECTS OF PARASITES ON THE GROWTH OF YELLOW PERCH, *PERCA FLAVESCENS. J. Parasitol.* 78(1):64-69. 1992. FR 37(2)

[Dep. Microbiol., Univ. Miss. Med. Cent., 2500 N. State St., Jackson 39216-4505]

92-003265 Timmons, T. J.; R. J. Schuler, Jr., and L. F. Duobinis-Gray. PREVALENCE OF *ACETODEXTRA AMIURI* (TREMATODA: CRYPTOGONIMIDAE) IN CHANNEL CATFISH, *ICTALURUS PUNCTATUS,* FROM KENTUCKY LAKE, KENTUCKY- TENNESSEE. *J. Helminthol. Soc. Wash.* 59(1)147-148. 1992. FR 37(2)

[Dep. Biol. Sci., Murray State Univ., Murray, KY 42071]

92-003266 Torres, Patricio and Angelica Neira. A NEW SPECIES OF *LIMNODERETREMA* (TREMATODA, DIGENEA) FROM THE FRESHWATER ATHERINID FISH *BASILICHTHYS AUSTRALIS* EIGENMANN, 1927 FROM THE SOUTH OF CHILE. *Mem. Inst. Oswaldo Cruz Rio J.* 86(4):433-436. 1991. FR 37(2)

[Inst. Parasitol., Univ. Austral Chile, Casilla 567, Valdivia, Chile]

92-003267 Van Every, Lynn R. and Delane C. Kritsky. NEOTROPICAL MONOGENOIDEA. 18. *ANACANTHORUS* MIZELLE AND PRICE, 1965 (DACTYLOGYRIDAE, ANACANTHORINAE) OF PIRANHA (CHARACOIDEA, SERRASALMIDAE) FROM THE CENTRAL AMAZON, THEIR PHYLOGENY, AND ASPECTS OF HOST-PARASITE COEVOLUTION. *J. Helminthol. Soc. Wash.* 59(1):52-75. 1992. FR 37(2)

[Dep. Biol. Sci., Idaho State Univ., Pocatello 83209] *Pygopristis, Serrasalmus nattereri, Pristobrycon* and *Serrasalmus* in Brazil.

92-003268 Venkateshappa, T.; D. Seenappa and L. Manohar. INCIDENCE AND INTENSITY OF *ERGASILUS MALNADENSIS* SP. NOV. INFESTATION ON *WALLAGO ATTU* (SCHNEIDER) IN VANIVILASA SAGAR RESERVOIR, KARNATAKA. *Mysore J. Agric. Sci.* 22(4):523-530. 1988. FR 37(2)

[Ext. Educ. Unit, Coll. Agric., Dharwad-580 005, India]

OTHER DISEASES AND PARASITES (Continued)

92-003269 Watanabe, Wade O.; Sarah Jane Smith; Robert I. Wicklund and Bori L. Olla. EVALUATION OF METHODS FOR PREVENTION AND CONTROL OF MONOGENETIC TREMATODE (*NEOBENEDENIA MELLENI*) PARASITOSIS OF FLORIDA RED TILAPIA REARED IN SEAWATER POOLS. *J. World Aquacult. Soc.* 22(3):63A. 1991. Abstract only. FR 37(2)

[Caribbean Mar. Res. Cent., c/o Fla. State Univ. Mar. Lab., Rt. 1, Box 456, Sopchoppy 32358] *Tilapia urolepis* x *T. mossambica.*

92-003270 Whittington, I. D. and G. C. Kearn. THE ADHESIVE ATTITUDES OF SOME GILL-PARASITIC CAPSALID MONOGENEANS. *J. Helminthol.* 65(4):280-285. 1991. FR 37(2)

[Dep. Parasitol., Univ. Queensland, Brisbane, Qld. 4072, Australia] *Plectropomus maculatus, Epinephelus fasciatus,* and *Lutjanus carponotatus* in Australia.

92-003271 Williams, Ernest H., Jr., and William G. Dyer. SOME DIGENEA FROM FRESHWATER FISHES OF ALABAMA AND FLORIDA INCLUDING *ALLOCREADIUM* (*NEOALLOCREADIUM*) *LUCYAE* SP. N. (DIGENEA: ALLOCREADIIDAE). *J. Helminthol. Soc. Wash.* 59(1)111-116. 1992. FR 37(2)

[Caribbean Aquat. Anim. Health Proj., Dep. Mar. Sci., Univ. Puerto Rico, P.O. Box 908, Lajas 00667-0908] Data for 24 species.

POLLUTION

92-003272 Akkerman, Ida; Wim Cofino and Franciscus Colijn. TOWARDS INTEGRATED CHEMICAL AND BIOLOGICAL MONITORING. *Water Sci. Technol.* 24(10):99-105. 1991. FR 37(2)

[Minist. Transport & Public Works, Tidal Waters Div., P.O. Box 3006, 2280 MH Rijswijk, Netherlands]

92-003273 Albert, Richard C. and Edmund J. Washuta. FISH HEALTH STUDY A FIRST FOR THE DELAWARE ESTUARY. *Water Environ. Technol.* 4(4):18, 20, 22. 1992. FR 37(2)

[Delaware River Basin Comm., West Trenton, NJ]

92-003274 Ankley, Gerald T.; Keith Lodge; Daniel J. Call; Mary D. Balcer; Larry T. Brooke; Philip M. Cook; Russell G. Kreis, Jr.; Anthony R. Carlson; Rodney D. Johnson; Gerald J. Niemi; Robert A. Hoke; Corlis W. West; John P. Giesy; Paul D. Jones and Zhang C. Fuying. INTEGRATED ASSESSMENT OF CONTAMINATED SEDIMENTS IN THE LOWER FOX RIVER AND GREEN BAY, WISCONSIN. *Ecotoxicol. Environ. Saf.* 23(1):46-63. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Environ. Res. Lab.-Duluth, 6201 Congdon Blvd., Duluth, MN 55804] *Ictalurus* and *Pimephales promelas.*

92-003275 Attar, Khudre M.; M. Zamil El-Faer; T. N. Rawdah and B. S. Tawabini. LEVELS OF ARSENIC IN FISH FROM THE ARABIAN GULF. *Mar. Pollu. Bull.* 24(2):94-97. 1992. FR 37(2)

[Cent. Analytical & Material Characterization Lab., Res. Inst., King Fahd Univ. Petroleum & Minerals, Box 810, Dhahran 31261, Saudi Arabia] Data for 13 species.

92-003276 Baxter, R. M.; J. H. Carey; D. R. S. Lean and B. K. Burnison. INFLUENCE OF TROPHIC STATUS ON THE BEHAVIOUR OF CONTAMINANTS IN AQUATIC SYSTEMS. *J. Contam. Hydrol.* 9(1-2):1-15. 1992. FR 37(2)

[Lakes Res. Branch, Natl. Water Res. Inst., P.O. Box 5050, Burlington, ON, Canada L7R 4A6]

92-003277 Bull, Keith R. and Jane R. Hall. A CLASSIFICATION OF ACIDIFIED CATCHMENTS IN BRITAIN. *Environ. Pollut.* 75(3):323-332. 1992. FR 37(2)

[NERC Inst. Terrestrial Ecol., Monks Wood Exp. Stn., Abbots Ripton, Huntingdon PE17 2LS, England]

92-003278 Carline, Robert F.; William E. Sharpe and Charles J. Gagen. CHANGES IN FISH COMMUNITIES AND TROUT MANAGEMENT IN RESPONSE TO ACIDIFICATION OF STREAMS IN PENNSYLVANIA. *Fisheries (Bethesda)* 17(1):33-38. 1992. FR 37(2)

[Coop. Fish & Wildl. Res. Unit, Ferguson Bldg., University Park, PA 16802] *Salvelinus fontinalis.*

92-003279 Christiansen, Curtis C.; Larry W. Hesse and Bruce Littell. CONTAMINATION OF THE CHANNEL CATFISH (*ICTALURUS PUNCTATUS*) BY ORGANOCHLORINE PESTICIDES AND POLYCHLORINATED BIPHENYLS IN THE MISSOURI RIVER. *Trans. Nebr. Acad. Sci.* Vol. 18. p. 93-98. 1991. FR 37(2)

[Dep. Environ. Control, 301 Centennial Mall S., Lincoln, NE 68509]

92-003280 Cooper, Charles M. INSECTICIDE CONCENTRATIONS IN ECOSYSTEM COMPONENTS OF AN INTENSIVELY CULTIVATED WATERSHED IN MISSISSIPPI. *J. Freshwater Ecol.* 6(3):237-247. 1991. FR 37(2)

[U.S. Dep. Agric., Agric. Res. Serv., Natl. Sedimentation Lab., Oxford, MS 38655-1157]

92-003281 Crossland, Norman O. and Thomas W. La Point, editors. SYMPOSIUM ON AQUATIC MESOCOSMS IN ECOTOXICOLOGY. *Environ. Toxicol. Chem.* 11(1):140p. 1992. FR 37(2)

[Dep. Biol., Univ. Miss., Oxford 38677]

POLLUTION (Continued)

92-003282 Cutler, J. K. and J. R. Leverone. EFFECTS OF THE ANCLOTE POWER PLANT THERMAL EFFLUENT ON SEAGRASS ASSOCIATED INFAUNA. *Fla. Sci.* 55(Suppl. 1):15. 1992. Abstract only. FR 37(2)
[Mote Mar. Lab., 1600 Thompson Pkwy., Sarasota, FL 34236]

92-003283 Dillaha, Theo A. ROLE OF BEST MANAGEMENT PRACTICES IN RESTORING THE HEALTH OF THE CHESAPEAKE BAY: ASSESSMENTS OF EFFECTIVENESS. *Chesapeake Bay Program* TRS41/90. p. 57-81. 1990. FR 37(2)
[VPI&SU, Dep. Agric. Eng., Blacksburg, VA 24061]

92-003284 Fabrizio, Mary C.; Ronald J. Sloan and John F. O'Brien. STRIPED BASS STOCKS AND CONCENTRATIONS OF POLYCHLORINATED BIPHENYLS. *Trans. Am. Fish. Soc.* 120(5):541-551. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent.-Great Lakes, 1451 Green Rd., Ann Arbor, MI 48105] *Morone saxatilis.*

92-003285 Fairchild, James F.; Thomas W. La Point; James L. Zajicek; Marcia K. Nelson; F. James Dwyer and Phillip A. Lovely. POPULATION-, COMMUNITY- AND ECOSYSTEM-LEVEL RESPONSES OF AQUATIC MESOCOSMS TO PULSED DOSES OF A PYRETHROID INSECTICIDE. *Environ. Toxicol. Chem.* 11(1):115-129. 1992. FR 37(2)
[Nat. Fish. Contam. Res. Cent., U.S. Fish & Wildl. Serv., 4200 New Haven Rd., Columbia, MO 65201] *Lepomis macrochirus* in Missouri.

92-003286 Flogstad, Harald; Idar Schei; Yngve Torgersen and Per Johan Rottereng. DISINFECTION AND WASTE REDUCTION OF EFFLUENT FROM FISH SLAUGHTERIES. *J. World Aquacult. Soc.* 22(3):25A. 1991. Abstract only. FR 37(2)
[Sintef NHL, Found. Sci. & Ind. Res., Norwegian Hydrotechnical Lab., 7034 Trondheim, Norway]

92-003287 Forneris, G.; V. Giaccone; G. Quaglino; E. Parisi and G. Alessio. [PERCH (*PERCA FLUVIATILIS*) AS BIOLOGICAL INDICATOR OF HEAVY METAL POLLUTION OF INLAND WATERS.] *Ind. Alimentari* 26(3):553-558. n.d. In Italian. From Ann. Fac. Med. Vet. Torino No. 32. p. 184-185. 1987. FR 37(2)

92-003288 Forseth, T.; O. Ugedal; B. Jonsson; A. Langeland and O. Njastad. RADIOCAESIUM TURNOVER IN ARCTIC CHARR (*SALVELINUS ALPINUS*) AND BROWN TROUT (*SALMO TRUTTA*) IN A NORWEGIAN LAKE. *J. Appl. Ecol.* 28(3):1053-1067. 1991. FR 37(2)
[Norwegian Inst. Nat. Res., N-7004 Trondheim, Norway]

92-003289 Hakanson, Lars; Tord Andersson and Ake Nilsson. RADIOACTIVE CAESIUM IN FISH IN SWEDISH LAKES 1986-1988 - GENERAL PATTERN RELATED TO FALLOUT AND LAKE CHARACTERISTICS. *J. Environ. Radioact.* 15(3):207-229. 1992. FR 37(2)
[Dep. Hydrol., Uppsala Univ., V. Agatan 24, 753 09 Uppsala, Sweden]

92-003290 Hargrave, B. T.; G. C. Harding; W. P. Vass; P. E. Erickson; B. R. Fowler and V. Scott. ORGANOCHLORINE PESTICIDES AND POLYCHLORINATED BIPHENYLS IN THE ARCTIC OCEAN FOOD WEB. *Arch. Environ. Contam. Toxicol.* 22(1):41-54. 1992. FR 37(2)
[Habitat Ecol. Div., Dep. Fish. & Oceans, Bedford Inst. Oceanogr., Dartmouth, NS, Canada B2Y 4A2] *Lycodes frigidus.*

92-003291 Harvey, B. R.; R. D. Ibbett; K. J. Williams and M. B. Lovett. THE DETERMINATION OF TECHNETIUM-99 IN ENVIRONMENTAL MATERIALS. *Aquat. Environ. Prot. Analyt. Meth. Minist. Agric. Fish. Food (Lowestoft)* No. 8. 22p. 1991. FR 37(2)
Gadus morhua.

92-003292 Heinis, Larry J. and Michael L. Knuth. THE MIXING, DISTRIBUTION AND PERSISTENCE OF ESFENVALERATE WITHIN LITTORAL ENCLOSURES. *Environ. Toxicol. Chem.* 11(1):11-25. 1992. FR 37(2)
[Lake Superior Res. Inst., Univ. Wis., Superior 54880]

92-003293 Hellou, J.; L. L. Fancey and J. F. Payne. CONCENTRATIONS OF TWENTY-FOUR ELEMENTS IN BLUEFIN TUNA, *THUNNUS THYNNUS* FROM THE NORTHWEST ATLANTIC. *Chemosphere* 24(2):211-218. 1992. FR 37(2)
[Sci. Branch, Dep. Fish. & Oceans, P.O. Box 5667, St. John's, NF, Canada A1C 5X1]

92-003294 Hong, Chia-Swee; Brian Bush and Ju Xiao. COPLANAR PCBs IN FISH AND MUSSELS FROM MARINE AND ESUTARINE WATERS OF NEW YORK STATE. *Ecotoxicol. Environ. Saf.* 23(1):118-131. 1992. FR 37(2)
[Wadsworth Cent. Lab. & Res., State Dep. Health, P.O. Box 509, Albany, NY 12201-0509] *Morone saxatilis.*

92-003295 Huggett, Robert J.; Michael A. Unger; Peter F. Seligman and Aldis O. Valkirs. THE MARINE BIOCIDE TRIBUTYLTIN. *Environ. Sci. Technol.* 26(2):232-237. 1992. FR 37(2)
[Coll. William & Mary, Gloucester Point, VA 23062]

POLLUTION (Continued)

92-003296 Hutcheson, M. R. WASTE LOAD ALLOCATION FOR CONSERVATIVE SUBSTANCES TO PROTECT AQUATIC ORGANISMS. *Water Resour. Res.* 28(1):215-220. 1992. FR 37(2)
[Water Resour. Board, 600 N. Harvey, P.O. Box 150, Oklahoma City, OK 73101]

92-003297 Ilyinsky, V. V.; M. N. Semenenko; S. G. Yuferova; N. N. Troshina and T. V. Koronelli. NITROGEN- AND PHOSPHORUS-CONTAINING FERTILIZER STIMULATES BIODEGRADATION OF OIL HYDROCARBONS UNDER MARINE CONDITIONS. *Mosc. Univ. Biol. Sci. Bull. (Engl. Transl. Vestn. Mosk. Univ. Biol.)* 46(2):62-65. 1991. FR 37(2)

92-003298 International Council for the Exploration of the Sea. A REVIEW OF MEASUREMENTS OF TRACE METALS IN COASTAL AND SHELF SEA WATER SAMPLES COLLECTED BY ICES AND JMP LABORATORIES DURING 1985-1987. *Int. Counc. Explor. Sea Coop. Res. Rep.* No. 178. 64p. 1991. FR 37(2)
[Palaegade 2-4, DK-1261 Copenhagen K, Denmark]

92-003299 Koulikov, A. O. and I. N. Ryabov. SPECIFIC CESIUM ACTIVITY IN FRESHWATER FISH AND THE SIZE EFFECT. *Sci. Total Environ.* 112(1):125-142. 1992. FR 37(3) [A.N. Severtsova Inst. Evol. Morphol. & Ecol. Anim. & Integrated Radioecol. Expedition, USSR Acad. Sci., 33 Leninsky Prospect, Moscow V-71, 117071, Russia] *Hypophthalmichthys molitrix* in the USSR.

92-003300 Kruize, R. R., editor. NORTH SEA POLLUTION - TECHNICAL STRATEGIES FOR IMPROVEMENT. PROCEEDINGS OF THE IAWPRC INTERNATIONAL CONFERENCE, HELD IN AMSTERDAM, THE NETHERLANDS, 10-14 SEPTEMBER 1990. *Water Sci. Technol.* 24(10):351p. 1991. FR 37(2)
[Sewerage & Water Manage. Dep. Amsterdam (RWA), Wibautstr. 3, 1091 GH Amsterdam, Netherlands] Selected papers indexed in this issue of *Fisheries Review.*

92-003301 Leah, R. T.; S. J. Evans and M. S. Johnson. MERCURY IN FLOUNDER (*PLATICHTHYS FLESUS* L.) FROM ESTUARIES AND COASTAL WATERS OF THE NORTH-EAST IRISH SEA. *Environ. Pollut.* 75(3):317-322. 1992. FR 37(2)
[Ind. Ecol. Res. Cent., Dep. Environ. & Evol. Biol., Univ. Liverpool, P.O. Box 147, Liverpool L69 3BX, England]

92-003302 Lewis, Richard J. CIGUATOXINS ARE POTENT ICHTHYOTOXINS. *Toxicon* 30(2):207-211. 1992. FR 37(2)
[South. Fish. Cent., QDPI, Deception Bay, Qld. 4508, Australia] *Gambusia affinis.*

92-003303 Long, Edward R. RANGES IN CHEMICAL CONCENTRATIONS IN SEDIMENTS ASSOCIATED WITH ADVERSE BIOLOGICAL EFFECTS. *Mar. Pollut. Bull.* 24(1):38-45. 1992. FR 37(2)
[NOAA, Coastal Monitoring & Bioeffects Assessment Div., 7600 Sand Point Way NE, Seattle, WA 98115]

92-003304 Lopez, J. M. STATE OF MARINE POLLUTION OF THE CARIBBEAN REGION. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 20. 1988. English and Spanish abstract only. FR 37(2)
[Cent. Energy & Environ. Res./UPR, Mayaguez, PR]

92-003305 Lorentz, Chris; Nick Asbaugh and L. P. Orr. A COMPARISON OF GENETIC VARIABILITY IN FISH POPULATIONS IN A CLEAN WATER STREAM VERSUS THAT IN AN ADJACENT POLLUTED STREAM. *Ohio J. Sci.* 92(2):56. 1992. Abstract only. FR 37(2)
[Dep. Biol. Sci., Kent State Univ., Kent, OH 44242] *Catostomus commersoni, Pimephales notatus,* and *Semotilus atromaculatus* in Ohio.

92-003306 Lozano, Stephen J.; Susan L. O'Halloran; Kenneth W. Sargent and John C. Brazner. EFFECTS OF ESFENVALERATE ON AQUATIC ORGANISMS IN LITTORAL ENCLOSURES. *Environ. Toxicol. Chem.* 11(1):35-47. 1992. FR 37(2)
[Cent. Lake Superior Environ. Studies, Univ. Wis., Superior 54880] *Lepomis macrochirus* in Minnesota.

92-003307 Mackey, A. P. THE BIOTA OF THE RIVER DEE (CENTRAL QUEENSLAND, AUSTRALIA) IN RELATION TO THE EFFECTS OF ACID MINE DRAINAGE. *Proc. R. Soc. Queensl.* No. 99. p. 9-19. 1988. FR 37(2)
[Dep. Biol., Capricornia Inst. Adv. Educ., Rockhampton, Qld. 4702, Australia]

92-003308 Mast, P.-G. and G. Gunkel. RESIDUE OF POLYCHLORINATED BIPHENYLS IN FISH OF LIMNIC SYSTEMS IN URBAN AREAS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2478-2481. 1989. FR 37(2)
[Univ. Technol., Str. 17, Juni 135, D-1000 Berlin, Germany] *Abramis brama, Carassius carassius, Rutilus rutilus,* and *Anguilla anguilla* in Germany.

92-003309 McVicar, A. H.; D. W. Bruno and C. O. Fraser. FISH DISEASE AS AN INDICATOR OF ENVIRONMENTAL QUALITY AT SEWAGE SLUDGE DUMPING SITES. *Water Sci. Technol.* 24(10):295-296. 1991. FR 37(2)
[SOAFD Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8DB, Scotland] *Limanda limanda.*

POLLUTION (Continued)

92-003310 Nakamoto, Rodney J. and Thomas J. Hassler. SELENIUM AND OTHER TRACE ELEMENTS IN BLUEGILLS FROM AGRICULTURAL RETURN FLOWS IN THE SAN JOAQUIN VALLEY, CALIFORNIA. *Arch. Environ. Contam. Toxicol.* 22(1):88-98. 1992. FR 37(2)

[U.S. For. Serv., Redwood Sci. Lab., 1700 Bayview, Arcata, CA 95521] *Lepomis macrochirus.*

92-003311 Paine, Michael D.; William C. Leggett; Jeff K. McRuer and Kenneth T. Frank. EFFECTS OF INCUBATION IN OILED SEDIMENT ON EMERGENCE OF CAPELIN (*MALLOTUS VILLOSUS*) LARVAE. *Can. J. Fish. Aquat. Sci.* 48(11):2228-2239. 1991. In English with French summ. FR 37(2)

[E.V.S. Consult. Ltd., 195 Pemberton Ave., North Vancouver, BC, Canada V7P 2R4]

92-003312 Patrick, Robert; Jerald Fletcher; Stephen Lovejoy; William Van Beek; Garth Holloway and James Binkley. ESTIMATING REGIONAL BENEFITS OF REDUCING TARGETED POLLUTANTS: AN APPLICATION TO AGRICULTURAL EFFECTS ON WATER QUALITY AND THE VALUE OF RECREATIONAL FISHING. *J. Environ. Manage.* 33(4):301-310. 1991. FR 37(2)

[Dep. Mineral Econ., Colo. School Mines, Golden 80431]

92-003313 Poulin, R. TOXIC POLLUTION AND PARASITISM IN FRESHWATER FISH. *Parasitol. Today* 8(2):58-61. 1992. FR 37(2)

[Dep. Sci. Biol., Univ. Quebec, P.O. Box 8888, Stn. A, Montreal, PQ, Canada H3C 3P8]

92-003314 Rask, Martti. CHANGES IN FISH POPULATION STRUCTURE OF SOME ACIDIFIED LAKES OF SOUTHERN FINLAND DURING A THREE YEAR PERIOD. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2425-2427. 1989. FR 37(2)

[Finnish Game & Fish. Res. Inst., Evo State Fish. & Aquacult. Res. Stn., SF-16970 Evo, Finland] *Perca fluviatilis, Rutilus rutilus, Gymnocephalus cernuus, Esox lucius, Coregonus albula, Lota lota, Abramis brama, Scardinius erythrophthalmus,* and *Carassius carassius.*

92-003315 Ronnberg, Olof; Kaj Adjers; Curt Ruokolahti and Maria Bondestam. *FUCUS VESICULOSUS* AS INDICATOR OF HEAVY METAL AVAILABILITY IN A FISH FARM RECIPIENT IN THE NORTHERN BALTIC SEA. *Mar. Pollut. Bull.* 21(8):388-392. 1990. FR 37(2)

[Dep. Biol. & Huso Biol. Stn., Abo Akad. Univ., SF-20500 Abo, Finland]

92-003316 Sandstrom, Olof; Peter Karas and Erik Neuman. PULP MILL EFFLUENT EFFECTS ON SPECIES DISTRIBUTIONS AND RECRUITMENT IN BALTIC COASTAL FISH. *Finn. Fish. Res.* Vol. 12. p. 101-110. 1991. FR 37(2)

[Natl. Board Fish., Sweden, Inst. Coastal Res., P.O. Box 584, S-740 71 Oregrund, Sweden] *Perca fluviatilis* and *Rutilus rutilus.*

92-003317 Saxena, P. K. and R. S. Jior. IMPACT OF THE BUDHA NALLAH BROOK ON THE RIVER SATLUJ WATERS. II-OCCURRENCE OF FISH AND REPRODUCTIVE BIOLOGY OF *CIRRHINA MRIGALA* (HAM.). *Int. J. Environ. Stud.* 39(4):305-311. 1992. FR 37(2)

[Dep. Zool., Fac. Basic Sci., Punjab Agric. Univ., Ludhiana-141 004, India]

92-003318 Slip, David J. and Harry R. Burton IV. ACCUMULATION OF FISHING DEBRIS, PLASTIC LITTER, AND OTHER ARTIFACTS, ON HEARD AND MACQUARIE ISLANDS IN THE SOUTHERN OCEAN. *Environ. Conserv.* 18(3):249-254. 1991. FR 37(2)

[Australian Antarctic Div., Channel Hwy., Kingston, Tasm. 7050, Australia]

92-003319 Stagg, R. M. NORTH SEA TASK FORCE BIOLOGICAL EFFECTS MONITORING PROGRAMME. *Water Sci. Technol.* 24(10):87-98. 1991. FR 37(2)

[Scottish Off. Agric. & Fish. Dep. Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8DB, Scotland]

92-003320 Turkstra, E.; M. C. Th. Scholten; C. T. Bowmer and H. P. M. Schobben. A COMPARISON OF THE ECOLOGICAL RISKS FROM FISHERIES AND POLLUTION TO THE NORTH SEA BIOTA. *Water Sci. Technol.* 24(10):147-153. 1991. FR 37(2)

[Minist. Transport & Public Works, North Sea Dir., P.O. Box 5807, 2280 HV Rijswijk, Netherlands]

92-003321 Turunen, Timo and Jukka Alm. MERCURY CONCENTRATIONS OF PIKE (*ESOX LUCIUS* L.) IN EASTERN FINLAND RELATED TO SOME WATER QUALITY PARAMETERS. *Aqua Fenn.* 20(2):181-190. 1990. In English with Finnish summ. FR 37(2)

[Univ. Joensuu, Karelian Inst., Sect. Ecol., P.O. Box 111, 80101 Joensuu, Finland]

92-003322 Vik, Eilen Arctander; James D. Berg; Siri Bakke and Tore Lundh. REVIEW OF OFFSHORE CHEMICAL SELECTION, USE AND OPERATING PROCEDURE TO MINIMIZE ENVIRONMENTAL IMPACT. *Water Sci. Technol.* 24(10):135-142. 1991. FR 37(2)

[Aquateam-Norwegian Water Technol. Cent. A/S, P.O. Box 6326, Etterstad, 0604 Oslo 6, Norway]

POLLUTION (Continued)

92-003323 Voigt, Heinz-Rudolf. [NOTES ON THE WATER QUALITY AND FISH FAUNA AT NATO BIOLOGICAL STATION IN THE LEMLAND ARCHIPELAGO, ALAND ISLANDS.] *Mem. Soc. Fauna Flora Fenn.* 67(3):107-113. 1991. In Finnish with English summ. FR 37(2)

[Dep. Zool., Univ. Helsinki, N. Jamvagsg. 13, SF-00100 Helsinki, Finland] Data for 31 species.

92-003324 Vuorinen, Marja and Pekka J. Vuorinen. MORTALITY AND GROWTH OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) EARLY LIFE PHASES IN EXPOSURE TO BLEACHED KRAFT MILL EFFLUENT (BKME). *Finn. Fish. Res.* Vol. 12. p. 111-123. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-003325 Webber, E. Cliff; William G. Deutsch; David R. Bayne and Wendy C. Seesock. ECOSYSTEM-LEVEL TESTING OF A SYNTHETIC PYRETHROID INSECTICIDE IN AQUATIC MESOCOSMS. *Environ. Toxicol. Chem.* 11(1):87-105. 1992. FR 37(2)

[Dep. Fish. & Allied Aquacult. & Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849] *Lepomis macrochirus* in Alabama.

92-003326 Zitko, V. PATTERNS OF 2,3,7,8-SUBSTITUTED CHLORINATED DIBENZODIOXINS AND DIBENZOFURANS IN AQUATIC FAUNA. *Sci. Total Environ.* 111(2/3):95-108. 1992. FR 37(2)

[Mar. Chem. Div., Physical & Chem. Sci. Branch, Dep. Fish. & Oceans, St. Andrews Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

FISH KILLS

92-003327 Braunbeck, Thomas and Alfred Volkl. APPLICATIONS OF EXPERIMENTAL HISTOLOGY AND CYTOLOGY IN THE DIAGNOSIS OF FISH KILLS AFTER CHEMICAL SPILLS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2477. 1989. Abstract only. FR37(2)

[Dep. Zool. I, Univ. Heidelberg, Im Neuenheimer Feld 230, D-6900 Heidelberg, Germany] *Anguilla anguilla* in Europe.

92-003328 Gyano, A. and E. Papp. QUALITY OF WATERS UTILIZED BY HUNGARIAN FISHERIES. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2523. 1989. Abstract only. FR 37(2)

[Hydrobiol. Lab. Minist. Agric. & Food, P.O. Box 47, H-2441 Szazhalombatta, Hungary]

92-003329 Morrison, J. A.; I. R. Napier and J. C. Gamble. MASS MORTALITY OF HERRING EGGS ASSOCIATED WITH A SEDIMENTING DIATOM BLOOM. *J. Cons. Cons. Int. Explor. Mer* 48(2):237-245. 1991. FR 37(2)

[SOAFD Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen, Scotland] *Clupea harengus* in Scotland.

92-003330 Oug, Eivind; Tor Eiliv Lein; Regina Kufner and Inger-Britt Falk-Petersen. ENVIRONMENTAL EFFECTS OF A HERRING MASS MORTALITY IN NORTHERN NORWAY. IMPACT ON AND RECOVERY OF ROCKY-SHORE AND SOFT-BOTTOM BIOTAS. *Sarsia* 76(3):195-207. 1991. FR 37(2)

[Norwegian Inst. Water Res., Reg. Off. Sorlandet, Televeien 1, N-4890 Grimstad, Norway]

92-003331 Renault, Tristan; Gilles Breuil and Jean Robert Bonami. MASS MORTALITIES IN HATCHERY-REARED SEA BASS, *LATES CALCARIFER*, LARVAE ASSOCIATED WITH THE PRESENCE IN THE BRAIN AND EYE RETINA OF PARTICLES IDENTIFIED AS VIRAL UNITS. *J. World Aquacult. Soc.* 22(3):50A. 1991. Abstract only. FR 37(2)

[Lab. Pathol., IFREMER-Cent. Oceanol. Pac., BP 7004 Taravao, Tahiti, French Polynesia]

TOXICOLOGY; BIOASSAYS

92-003332 Angelow, Roy V. and D. McEwen Nicholls. THE EFFECT OF MERCURY EXPOSURE ON LIVER mRNA TRANSLATABILITY AND METALLOTHIONEIN IN RAINBOW TROUT. *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):439-444. 1991. FR37(2)

[Ontario Minist. Environ., Water Resour. Branch, 1 St. Clair Ave. W., Toronto, ON, Canada M4V 1K6] *Oncorhynchus mykiss.*

92-003333 Atland, A. and B. T. Barlaup. RATE OF GASTRIC EVACUATION IN BROWN TROUT (*SALMO TRUTTA* L.) IN ACIDIFIED AND NON-ACIDIFIED WATER. *Water Air Soil Pollut.* 60(1-2):197-204. 1991. FR 37(2)

[Mus. Zool., Dep. Anim. Ecol., Univ. Bergen, Museplass 3, N-5007 Bergen, Norway]

92-003334 Bader, Joel A. and John M. Grizzle. EFFECTS OF AMMONIA ON GROWTH AND SURVIVAL OF RECENTLY HATCHED CHANNEL CATFISH. *J. Aquat. Anim. Health* 4(1):17-23. 1992. FR 37(2)

[Grizzle: Southeast. Coop. Fish Dis. Proj., Dep. Fish. & Allied Aquacult., Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849] *Ictalurus punctatus.*

TOXICOLOGY; BIOASSAYS (Continued)

92-003335 Barghigiani, C. and S. De Ranieri. MERCURY CONTENT IN DIFFERENT SIZE CLASSES OF IMPORTANT EDIBLE SPECIES OF THE NORTHERN TYRRHENIAN SEA. *Mar. Pollut. Bull.* 24(2):114-116. 1992. FR 37(2)

[Ist. Biofisica, CNR, Via S. Lorenzo 26, 56100 Pisa, Italy] *Merluccius merluccius* and *Trisopterus minutus capelanus* in Italy.

92-003336 Bentley, P. J. A HIGH-AFFINITY ZINC-BINDING PLASMA PROTEIN IN CHANNEL CATFISH (*ICTALURUS PUNCTATUS*). *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):491-494. 1991. FR 37(2)

[Dep. Anat. Physiol. Sci. & Radiol., Coll. Vet. Med., N.C. State Univ., Raleigh 27606]

92-003337 Block, Mats; Anders Wicklund Glynn and Peter Part. XANTHATE EFFECTS ON CADMIUM UPTAKE AND INTRACELLULAR DISTRIBUTION IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) GILLS. *Aquat. Toxicol. (Amst.)* 20(4):267-284. 1991. FR 37(2)

[Dep. Zoophysiol., Uppsala Univ., Box 560, S-751 22 Uppsala, Sweden]

92-003338 Bocquene, Gilles and Francois Galgani. [ACETYLCHOLINESTERASE IN MARINE ORGANISMS, INSTRUMENTAL IN MONITORING THE EFFECTS OF ORGANOPHOSPHOROUS AND CARBAMATE PESTICIDES.] *Oceanis* 17(4):439-448. 1991. In French with English summ. FR 37(2)

[IFREMER, rue de l'Ile d'Yeu, 44037 Nantes Cedex, France] *Pleuronectes platessa* and *Platichthys flesus.*

92-003339 Boge, G.; H. Roche and D. Houvet. [PHYSIOLOGICAL INDICATORS OF TOXICITY IN THE MARINE ENVIRONMENT.] *Oceanis* 17(4):351-365. 1991. In French with English summ. FR 37(2)

[Lab. Chim. Appl., Univ. Toulon & du Var, B.P. 132, 83957 La Garde Cedex, France] *Dicentrarchus labrax.*

92-003340 Borman, Dag; Carina Naf; Carl Rolff; Yngve Zebuhr; Brian Fry and John Hobbie. USING RATIOS OF STABLE NITROGEN ISOTOPES TO ESTIMATE BIOACCUMULATION AND FLUX OF POLYCHLORINATED DIBENZO-*p*-DIOXINS (PCDDs) AND DIBENZOFURANS (PCDFs) IN TWO FOOD CHAINS FROM THE NORTHERN BALTIC. *Environ. Toxicol. Chem.* 11(3):331-345. 1992. FR 37(2)

[Rolff: Aquat. Chem. Ecoxicol., Dep. Zool., Stockholm Univ., 106 91 Stockholm, Sweden]

92-003341 Brittain, John E.; Anders Storruste and Elena Larsen. RADIOCESIUM IN BROWN TROUT *(SALMO TRUTTA)* FROM A SUBALPINE LAKE ECOSYSTEM AFTER THE CHERNOBYL REACTOR ACCIDENT. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2345. 1989. Abstract only. FR 37(2)

[Freshwater Ecol. & Inland Fish. Lab., Univ. Oslo, Sarsgate 1, N-0562 Oslo 5, Norway]

92-003342 Chapman, Duane C. FAILURE OF GAS BLADDER INFLATION IN STRIPED BASS: EFFECT ON SELENIUM TOXICITY. *Arch. Environ. Contam. Toxicol.* 22(3):296-299. 1992. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish. Contam. Res. Cent., 4200 New Haven Rd., Columbia, MO 65201] *Morone saxatilis.*

92-003343 Chernyaev, Zh. A. and B. P. Strekozov. [THE BIOMONITORING OF ECOTOXICOLOGIC SITUATION IN RESERVES BY REVEALING OF CHLORORGANIC PESTICIDES IN FISH TISSUES.] *Biol. Nauki (Mosc.)* 335(11):114-123. 1991. In Russian with English summ. FR 37(2)

Coregonus.

92-003344 Chew, S. F. and Y. K. Ip. CYANIDE DETOXIFICATION IN THE MUDSKIPPER, *BOLEOPHTHALMUS BODDAERTI. J. Exp. Zool.* 261(1):1-8. 1992. FR 37(2)

[Dep. Zool., Natl. Univ. Singapore, Singapore 0511]

92-003345 Chugh, Sukhminder P. and Sukhpal Singh. ROLE OF THYROID HORMONES IN ROTENONE TREATED TELEOST; *ANABAS TESTUDINEUS* BLOCH: EFFECT ON OXIDATIVE ENZYME ACTIVITIES. *Am. Zool.* 31(5):71A. 1991. Abstract only. FR 37(2)

[Punjab Agric. Univ., Ludhiana, India]

92-003346 Cleveland, Laverne; Edward E. Little; Christopher G. Ingersoll; Raymond H. Wiedmeyer and Joseph B. Hunn. SENSITIVITY OF BROOK TROUT TO LOW pH, LOW CALCIUM AND ELEVATED ALUMINUM CONCENTRATIONS DURING LABORATORY PULSE EXPOSURES. *Aquat. Toxicol. (Amst.)* 19(4):303-318. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Fish. Contam. Res. Cent., Rt. 2, 4200 New Haven Rd., Columbia, MO] *Salvelinus fontinalis.*

92-003347 Cope, William Gregory. METALLOTHIONEIN AND BIOACCUMULATION OF CADMIUM IN JUVENILE BLUEGILLS EXPOSED TO AQUEOUS AND SEDIMENT-ASSOCIATED CADMIUM. *Ph.D. dissertation, Iowa State Univ.* 97p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):3998. 1992. Order No. DA9202345. FR 37(2)

Lepomis macrochirus.

TOXICOLOGY; BIOASSAYS (Continued)

92-003348 Crane, D. B. and C. Younghans-Haug. OXADIAZON RESIDUE CONCENTRATIONS IN SEDIMENT, FISH, AND SHELLFISH FROM A COMBINED RESIDENTIAL/AGRICULTURAL AREA IN SOUTHERN CALIFORNIA. *Bull. Environ. Contam. Toxicol.* 48(4):608-615. 1992. FR 37(2)
[Dep. Fish & Game, Fish & Wildl. Water Pollution Control Lab., 2005 Nimbus Rd., Rancho Cordova, CA 95670] *Notropis lutrensis.*

92-003349 Cravedi, J. P. and M. Baradat. COMPARATIVE METABOLIC PROFILING OF CHLORAMPHENICOL BY ISOLATED HEPATOCYTES FROM RAT AND TROUT (*ONCORHYNCHUS MYKISS*). *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):649-652. 1991. FR 37(2)
[Lab. Xenobiotiques, INRA, BP 3, 31931 Toulouse Cedex, France]

92-003350 Cronin, M. T. D.; J. C. Dearden and A. J. Dobbs. QSAR STUDIES OF COMPARATIVE TOXICITY IN AQUATIC ORGANISMS. *Sci. Total Environ.* Vol. 109/110. p. 431-439. 1991. FR 37(2)
[School Health Sci., Liverpool Polytechnic, Byrom St., Liverpool L3 3AF, England] *Pimephales promelas.*

92-003351 de Bruijin, Jack and Joop Hermens. QUALITATIVE AND QUANTITATIVE MODELING OF TOXIC EFFECTS OF ORGANOPHOSPHOROUS COMPOUNDS TO FISH. *Sci. Total Environ.* Vol. 109/110. p. 441-445. 1991. FR 37(2)
[Dir.-Gen. Environ. Prot., P.O. Box 450, 2260 MB Leidschendam, Netherlands] *Poecilia reticulata* and *Oncorhynchus mykiss.*

92-003352 De Gregori, I.; D. Delgado; H. Pinochet; N. Gras; M. Thieck; L. Munoz; C. Bruhn and G. Navarrete. TOXIC TRACE ELEMENTS IN CHILEAN SEAFOODS: DEVELOPMENT OF ANALYTICAL QUALITY CONTROL PROCEDURES. *Sci. Total Environ.* 111(2/3):201-218. 1992. FR 37(2)
[Pinochet: Chem. Inst., Catholic Univ. Valparaiso, P.O. Box 4059, Valparaiso, Chile]

92-003353 de Wolf, Watze; Eddy Yedema; Willem Seinen and Joop L. M. Hermens. TOXICOKINETICS OF AROMATIC AMINES IN GUPPY, *POECILIA RETICULATA. Sci. Total Environ.* Vol. 109/110. p. 383-386. 1991. FR 37(2)
[Res. Inst. Toxicol., Univ. Utrecht, P.O. Box 80.176, 3508 TD Utrecht, Netherlands]

92-003354 de Wolf, Watze; Antoon Opperhuizen; Willem Seinen and Joop L. M. Hermens. INFLUENCE OF SURVIVAL TIME ON THE LETHAL BODY BURDEN OF 2,3,4,5-TETRACHLOROANILINE IN THE GUPPY, *POECILIA RETICULATA. Sci. Total Environ.* Vol. 109/110. p. 457-459. 1991. FR 37(2)
[Res. Inst. Toxicol., Univ. Utrecht, P.O. Box 80.176, 3508 TD Utrecht, Netherlands]

92-003355 Dhainaut-Courtoit, Nicole; Sylvain Demuynck and Beatrice Salzet-Raveillon. [MECHANISMS OF DETOXIFICATION IN FISH AND MARINE INVERTEBRATES.] *Oceanis* 17(4):403-419. 1991. In French with English summ. FR 37(2)
[Lab. Ecotoxicol., C.N.R.S., U.R.A. 148, Univ. Lille I, 59655 Villeneuve d'Ascq Cedex, France]

92-003356 Dutta, Hiran M.; Todd Zeno and Chelliah R. Richmonds. TOXIC ACTION OF DIAZINON ON THE GILLS OF BLUEGILL SUNFISH, *LEPOMIS MACROCHIRUS. Ohio J. Sci.* 92(2):9. 1992. Abstract only. FR 37(2)
[Dep. Biol. Sci., Kent State Univ., Kent, OH 44242]

92-003357 El Hraiki, A.; M. Kessabi; Y. Sabhi; P. Benard and D. R. Buhler. [CONTAMINATION OF SEAFOOD PRODUCTS BY CADMIUM, CHROMIUM, MERCURY AND LEAD IN MOROCCO.] *Rev. Med. Vet. (Toulouse)* 143(1):49-56. 1992. In French with English, German, and Portuguese summ. FR 37(2)
[Inst. Agron. & Vet. Hassan II, B.P. 6202, Lab. Toxicol., Rabat, Morocco]

92-003358 Erickson, David A.; Frank E. Laib and John J. Lech. BIOTRANSFORMATION OF ROTENONE BY HEPATIC MICROSOMES FOLLOWING PRETREATMENT OF RAINBOW TROUT WITH INDUCERS OF CYTOCHROME P450. *Pestic. Biochem. Physiol.* 42(2):140-150. 1992. FR 37(2)
[Lech: Dep. Pharmacol. & Toxicol., Med. Coll. Wis., Milwaukee 53226] *Oncorhynchus mykiss.*

92-003359 Exley, Christopher and William Struthers. THE LOCALISATION OF ALUMINIUM IN THE TISSUES OF THE RAINBOW TROUT. *Aquaculture* 100(1-3):323-324. 1992. Abstract only. FR 37(2)
[Inst. Aquacult., Univ. Stirling, Stirling, Scotland] *Oncorhynchus mykiss.*

92-003360 Fukunaga, Kenji; Tetsuya Suzuki and Kozo Takama. EFFECT OF OZONE EXPOSURE ON THE COMPOSITIONS OF GILL AND ERYTHROCYTE MEMBRANE LIPIDS AND PROTEINS OF JAPANESE CHARR *(SALVELINUS LEUCOMAENIS). Comp. Biochem. Physiol. B Comp. Biochem.* 100(3):481-487. 1991. FR 37(2)
[Suzuki: Lab. Food Hygiene, Dep. Food Sci. & Technol., Fac. Fish., Hokkaido Univ., Hakodate 041, Japan]

92-003361 Gagne, Francois; Michel Marion and Francine Denizeau. METALLOTHIONEIN INDUCTION AND METAL HOMEOSTASIS IN RAINBOW TROUT HEPATOCYTES EXPOSED TO MERCURY. *Toxicol. Lett. (Amst.)* 51(1):99-107. 1990. FR 37(2)
[Denizeau: Univ. Quebec Montreal, C.P. 8888, Succ. A, Montreal, PQ, Canada H3C 3P8] *Oncorhynchus mykiss.*

TOXICOLOGY; BIOASSAYS (Continued)

92-003362 Gallagher, Evan P.; Russell C. Cattley and Richard T. Di Giulio. THE ACUTE TOXICITY AND SUBLETHAL EFFECTS OF CHLOROTHALONIL IN CHANNEL CATFISH *(ICTALURUS PUNCTATUS). Chemosphere* 24(1):3-10. 1992. FR 37(2)

[Di Giulio: Ecotoxicol. Lab., School Environ., Duke Univ., Durham, NC 27706]

92-003363 Gendusa, Tony C. and Thomas L. Beitinger. EXTERNAL BIOMARKERS TO ASSESS CHROMIUM TOXICITY IN ADULT *LEPOMIS MACROCHIRUS. Bull. Environ. Contam. Toxicol.* 48(2):237-242. 1992. FR 37(2)

[Beitinger: Dep. Biol. Sci., Univ. N. Tex., Denton 76203]

92-003364 Ghazaly, K. S. PHYSIOLOGICAL ALTERATIONS IN *CLARIAS LAZERA* INDUCED BY TWO DIFFERENT POLLUTANTS. *Water Air Soil Pollut.* 60(1-2):181-187. 1991. FR 37(2)

[Biol. Dep., Cent. Sci. & Math., P.O. Box 1070 Taif, Saudi Arabia]

92-003365 Ghazaly, K. S. INFLUENCES OF THIAMIN ON LEAD INTOXICATION, LEAD DEPOSITION IN TISSUES AND LEAD HEMATOLOGICAL RESPONSES OF *TILAPIA ZILLII. Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):417-421. 1991. FR 37(2)

[Biol. Dep., Cent. Sci. & Math., P.O. Box 1070, Taif, Saudi Arabia]

92-003366 Ghosh, A. R. and P. Chakrabarti. A SCANNING ELECTRON MICROSCOPIC PROBE INTO THE CELLULAR INJURY IN THE ALIMENTARY CANAL OF *NOTOPTERUS NOTOPTERUS* (PALLAS) AFTER CADMIUM INTOXICATION. *Ecotoxicol. Environ. Saf.* 23(2):147-160. 1992. FR 37(2)

[Zool. Dep., Burdwan Univ., Burdwan-713 104, West Bengal, India]

92-003367 Gill, Tejendra S.; Hema Tewari and Jaishree Pande. *IN VIVO* AND *IN VITRO* EFFECTS OF CADMIUM ON SELECTED ENZYMES IN DIFFERENT ORGANS OF THE FISH *BARBUS CONCHONIUS* HAM. (ROSY BARB). *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):501-505. 1991. FR 37(2)

[Dep. Anat., Thomas Jefferson Univ., 1020 Locust St., Philadelphia, PA 19107]

92-003368 Glynn, A. Wicklund; L. Andersson; S. Gabring and P. Runn. CADMIUM TURNOVER IN MINNOWS, *PHOXINUS PHOXINUS*, FED ^{109}Cd-LABELED *DAPHNIA MAGNA. Chemosphere* 24(3):359-368. 1992. FR 37(2)

[Dep. Zool., Uppsala Univ., Box 561, S-751 22 Uppsala, Sweden]

92-003369 Golow, A. A. and K. S. Aborah. ACUTE TOXICITY OF WOOD TAR AND DIELDRIN TO *LEBISTES RETICULATUS* (PL). *Bull. Environ. Contam. Toxicol.* 48(3):463-466. 1992. FR 37(2)

[Dep. Chem., Univ. Sci. & Technol., Kumasi, Ghana]

92-003370 Goodman, Larry R.; Michael J. Hemmer; Douglas P. Middaugh and James C. Moore. EFFECTS OF FENVALERATE ON THE EARLY LIFE STAGES OF TOPSMELT (*ATHERINOPS AFFINIS*). *Environ. Toxicol. Chem.* 11(3):409-414. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Gulf Breeze Environ. Res. Lab., Sabine Island, Gulf Breeze, FL 32561]

92-003371 Gorge, Gerhard and Roland Nagel. KINETICS AND METABOLISM OF 14C-LINDANE AND 14C-ATRAZINE IN EARLY LIFE STAGES OF ZEBRAFISH (*BRACHYDANIO RERIO*). *Chemosphere* 21(9):1125-1137. 1990. FR 37(2)

[Dep. Zool., Johannes Gutenberg-Univ., Saastr. 21, D-6500 Mainz, Germany]

92-003372 Grady, Andrew W.; David L. Fabacher; George Frame and Bryan L. Steadman. MORPHOLOGICAL DEFORMITIES IN BROWN BULLHEADS ADMINISTERED DIETARY β-NAPHTHOFLAVONE. *J. Aquat. Anim. Health* 4(1):7-16. 1992. FR 37(2)

[Procter & Gamble Co., Miami Valley Lab., P.O. Box 398707, Cincinnati, OH 45239-8707] *Ictalurus nebulosus.*

92-003373 Greene, Lawrence E. and Emile Van Handel. SULFIDE SENSITIVITY IN FISHES OF THE INDIAN RIVER LAGOON, FLORIDA. *J. Am. Mosq. Control Assoc.* 8(1):95-96. 1992. FR 37(2)

[Med. Entomol. Lab., IFAS-Univ. Fla., 200 9th St. S.E., Vero Beach 32962] Data for 18 species.

92-003374 Grobler-van Heerden, Eurika; Johan H. J. van Vuren and Hein H. du Preez. BIOCONCENTRATION OF ATRAZINE, ZINC AND IRON IN THE BLOOD OF *TILAPIA SPARRMANII* (CICHLIDAE). *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):629-633. 1991. FR 37(2)

[Res. Unit Aquat. & Terrestrial Ecosyst., Dep. Zool., Rand Afrikaans Univ., P.O. Box 524, Johannesburg 2000, South Africa]

92-003375 Handy, R. D. THE ASSESSMENT OF EPISODIC METAL POLLUTION. II. THE EFFECTS OF CADMIUM AND COPPER ENRICHED DIETS ON TISSUE CONTAMINANT ANALYSIS IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Arch. Environ. Contam. Toxicol.* 22(1):82-87. 1992. FR 37(2)

[Dep. Biol. Sci., The Univ., Dundee DD1 4HN, Scotland]

TOXICOLOGY; BIOASSAYS (Continued)

92-003376 Handy, R. D. THE ASSESSMENT OF EPISODIC METAL POLLUTION. I. USES AND LIMITATIONS OF TISSUE CONTAMINANT ANALYSIS IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) AFTER SHORT WATERBORNE EXPOSURE TO CADMIUM OR COPPER. *Arch. Environ. Contam. Toxicol.* 22(1):74-81. 1992. FR 37(2)

[Dep. Biol. Sci., The Univ., Dundee DD1 4HN, Scotland]

92-003377 Hawkins, W. E.; W. W. Walker and R. M. Overstreet. SMALL FISH CARCINOGENESIS BIOASSAYS. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 21. 1988. English and Spanish abstract only. FR 37(2)

[Gulf Coast Res. Lab., Ocean Springs, MS] *Oryzias latipes* and *Poecilia reticulata.*

92-003378 Heath, Alan G. EFFECT OF WATER-BORNE COPPER ON PHYSIOLOGICAL RESPONSES OF BLUEGILL (*LEPOMIS MACROCHIRUS*) TO ACUTE HYPOXIC STRESS AND SUBSEQUENT RECOVERY. *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):559-564. 1991. FR 37(2)

[Dep. Biol., VPI&SU, Blacksburg, VA 24061]

92-003379 Hemmer, Michael J.; Douglas P. Middaugh and Valerie Comparetta. COMPARATIVE ACUTE SENSITIVITY OF LARVAL TOPSMELT, *ATHERINOPS AFFINIS*, AND INLAND SILVERSIDE, *MENIDIA BERYLLINA*, TO 11 CHEMICALS. *Environ. Toxicol. Chem.* 11(3):401-408. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Gulf Breeze Environ. Res. Lab., Sabine Island, Gulf Breeze, FL 32561]

92-003380 Hermanutz, Roger O.; Kathleen N. Allen; Thomas H. Roush and Steven F. Hedtke. EFFECTS OF ELEVATED SELENIUM CONCENTRATIONS ON BLUEGILLS (*LEPOMIS MACROCHIRUS*) IN OUTDOOR EXPERIMENTAL STREAMS. *Environ. Toxicol. Chem.* 11(2):217-224. 1992. FR 37(2)

[U.S. Environ. Prot. Agency, Monticello Ecol. Res. Stn., P.O. Box 500, Monticello, MN 55362]

92-003381 Hermens, Joop and Antoon Opperhuizen, editors. QSAR IN ENVIRONMENTAL TOXICOLOGY: PROCEEDINGS OF THE FOURTH INTERNATIONAL WORKSHOP, VELDHOVEN, NETHERLANDS, 16-20 SEPTEMBER 1990. *Sci. Total Environ.* Vol. 109/110. 705p. 1991. FR 37(2)

[Res. Inst. Toxicol., Univ. Utrecht, P.O. Box 80.176, 3508 TD Utrecht, Netherlands] Selected papers indexed in this issue of *Fisheries Review.*

92-003382 Hlohowskyj, Ihor and Norman Chagnon. REDUCTION IN TOLERANCE TO PROGRESSIVE HYPOXIA IN THE CENTRAL STONEROLLER MINNOW FOLLOWING SUBLETHAL EXPOSURE TO PHENOL. *Water Air Soil Pollut.* 60(1-2):189-196. 1991. FR 37(2)

[Ecol. Sci. Sect., Argonne Natl. Lab., Argonne, IL 60439] *Campostoma anomalum.*

92-003383 Hontela, Alice; Joseph B. Rasmussen; Celine Audet and Gaston Chevalier. IMPAIRED CORTISOL STRESS RESPONSE IN FISH FROM ENVIRONMENTS POLLUTED BY PAHs, PCBs, AND MERCURY. *Arch. Environ. Contam. Toxicol.* 22(3):278-283. 1992. FR 37(2)

[Dep. Sci. Biol., TOXEN, Univ. Quebec, C.P. 8888, Succ. A, Montreal, PQ, Canada H3C 3P8] *Perca flavescens* and *Esox lucius.*

92-003384 Ishimatsu, Atsushi; Takashi Tsuchiyama; Makoto Yoshida; Mamoru Sameshima; Mark Pawluk and Tatsuya Oda. EFFECT OF *CHATTONELLA* EXPOSURE ON ACID-BASE STATUS OF THE YELLOWTAIL. *Nippon Suisan Gakkaishi* 57(11):2115-2120. 1991. In English with Japanese summ. FR 37(2)

[Nomo Fish. Stn., Nagasaki Univ. Nomo, Nomozaki Nishisonoki, Nagasaki 851-05, Japan] *Seriola quinqueradiata.*

92-003385 Jensen, A. and F. Bro-Rasmussen. ENVIRONMENTAL CADMIUM IN EUROPE. *Rev. Environ. Contam. Toxicol.* Vol. 125. p. 101-181. 1992. FR 37(2)

[FORCE Inst., Div. Isotope Tech. & Analysis, Park Alle 345, DK-2605 Brondby, Denmark]

92-003386 Kaiser, Klaus L. E. and Sylvia R. Esterby. REGRESSION AND CLUSTER ANALYSIS OF THE ACUTE TOXICITY OF 267 CHEMICALS TO SIX SPECIES OF BIOTA AND THE OCTANOL/WATER PARTITION COEFFICIENT. *Sci. Total Environ.* Vol. 109/110. p. 499-514. 1991. FR 37(2)

[Lakes Res. Branch, Natl. Water Res. Inst., P.O. Box 5050, Burlington, ON, Canada L7R 4A6] *Pimephales promelas* and *Leuciscus idus melanotus.*

92-003387 Kakuta, I.; K. Namba; K. Uematsu and S. Murachi. PHYSIOLOGICAL RESPONSE OF THE FISH, *CYPRINUS CARPIO*, TO FORMALIN EXPOSURE - I. EFFECTS OF FORMALIN ON URINE FLOW, HEART RATE, RESPIRATION. *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):405-411. 1991. FR 37(2)

[Dep. Biotechnol., Senshu Univ., Ishinomaki, Japan]

92-003388 Karara, Adel H. and Victor A. McFarland. A PHARMACOKINETIC ANALYSIS OF THE UPTAKE OF POLYCHLORINATED BIPHENYLS (PCBs) BY GOLDEN SHINERS. *Environ. Toxicol. Chem.* 11(3):315-320. 1992. FR 37(2)

[McFarland: Environ. Lab., U.S. Army Eng. Waterways Exp. Stn., Vicksburg, MS 39180-6199] *Notemigonus crysoleucas.*

TOXICOLOGY; BIOASSAYS (Continued)

92-003389 Keizer, Johannes; Giuseppina D'Agostino and Luciano Vittozzi. THE IMPORTANCE OF BIOTRANSFORMATION IN THE TOXICITY OF XENOBIOTICS TO FISH. I. TOXICITY AND BIOACCUMULATION OF DIAZINON IN GUPPY (*POECILIA RETICULATA*) AND ZEBRA FISH (*BRACHYDANIO RERIO*). *Aquat. Toxicol. (Amst.)* 21(3-4):239-254. 1991. FR 37(2)
[Vittozzi: Ist. Superiore Sanita, Dep. Comp. Toxicol. & Ecotoxicol., Biochem. Toxicol. Unit, Viale Regina Elena 299, Rome, Italy]

92-003390 Khan, R. A.; D. Barker; R. Hooper and E. M. Lee. EFFECT OF PULP AND PAPER EFFLUENT ON A MARINE FISH, *PSEUDOPLEURONECTES AMERICANUS*. *Bull. Environ. Contam. Toxicol.* 48(3):449-456. 1992. FR 37(2)
[Dep. Biol. & Ocean Sci. Cent., Memorial Univ. Newfoundland, St. John's, NF, Canada A1C 5S7]

92-003391 Kramer, Vincent J.; Michael C. Newman; Margaret Mulvey and Gordon R. Ultsch. GLYCOLYSIS AND KREBS CYCLE METABOLITES IN MOSQUITOFISH, *GAMBUSIA HOLBROOKI*, GIRARD 1859, EXPOSED TO MERCURIC CHLORIDE: ALLOZYME GENOTYPE EFFECTS. *Environ. Toxicol. Chem.* 11(3):357-364. 1992. FR 37(2)
[Newman: Univ. Ga., Savannah River Ecol. Lab., Aiken, SC 29801]

92-003392 Lafaurie, Marc. [GENOTOXIC AND CARCINOGENIC EFFECTS USED AS BIOMARKERS OF CONTAMINATION.] *Oceanis* 17(4):475-496. 1991. In French with English summ. FR 37(2)
[Lab. Biotransformation & Cancerogenese, Fac. Med., Ave. Vallombrose, 06107 Nice Cedex 2, France]

92-003393 Lee, Charles J.; Michael C. Newman and Margaret Mulvey. TIME TO DEATH OF MOSQUITOFISH (*GAMBUSIA HOLBROOKI*) DURING ACUTE INORGANIC MERCURY EXPOSURE: POPULATION STRUCTURE EFFECTS. *Arch. Environ. Contam. Toxicol.* 22(3):284-287. 1992. FR 37(2)
[Newman: Univ. Ga., Savannah River Ecol. Lab., P.O. Drawer E, Aiken, SC 29801]

92-003394 Lemaire, Philippe; Jocelyne Berhaut; Sylviane Lemaire-Gony and Marc Lafaurie. ULTRASTRUCTURAL CHANGES INDUCED BY BENZO[a]PYRENE IN SEA BASS *(DICENTRARCHUS LABRAX)* LIVER AND INTESTINE: IMPORTANCE OF THE INTOXICATION ROUTE. *Environ. Res.* 57(1):59-72. 1992. FR 37(2)
[Plymouth Mar. Lab., Citadel Hill, Plymouth PL1 2PB, England]

92-003395 Lemaire, Philippe; Sylviane Lemaire-Gony; Jocelyne Berhaut and Marc Lafaurie. THE UPTAKE, METABOLISM, AND BIOLOGICAL HALF-LIFE OF BENZO[a]PYRENE ADMINISTERED BY FORCE-FEEDING IN SEA BASS (*DICENTRARCHUS LABRAX*). *Ecotoxicol. Environ. Saf.* 23(2):244-251. 1992. FR 37(2)
[Lab. Biotransform. Cancerogenese, UER Med., Ave. Valombrose, 06034 Nice Cedex, France]

92-003396 Lommel, A.; H. Kruse; E. Muller and O. Wassermann. ORGANOCHLORINE PESTICIDES, OCTACHLOROSTYRENE, AND MERCURY IN THE BLOOD OF ELB RIVER RESIDENTS, GERMANY. *Arch. Environ. Contam. Toxicol.* 22(1):14-20. 1992. FR 37(2)
[State Dep. Labour, Health & Social Affairs, Health & Environ. Div., Toxicol. Assessment Group, Tesdorpfstr. 8, W-2000 Hamburg 13, Germany]

92-003397 Magee, Philip S. COMPLEX FACTORS IN HYDROCARBON/WATER, SOIL/WATER AND FISH/WATER PARTITIONING. *Sci. Total Environ.* Vol. 109/110. p. 155-178. 1991. FR 37(2)
[BIOSAR Res. Proj., Vallejo, CA 94591]

92-003398 Marchini, Silvia; Maria L. Tosato; Teresa J. Norberg-King; Dean E. Hammermeister and Marilynn D. Hoglund. LETHAL AND SUBLETHAL TOXICITY OF BENZENE DERIVATIVES TO THE FATHEAD MINNOW, USING A SHORT-TERM TEST. *Environ. Toxicol. Chem.* 11(2):187-195. 1992. FR 37(2)
[Dep. Comp. Toxicol. & Ecotoxicol., Inst. Superiore Sanita, Viale Regina Elena 299, 00161 Rome, Italy] *Pimephales promelas.*

92-003399 Marty, Gary D.; Scott Wetzlich; Jose M. Nunez; Arthur Craigmill and David E. Hinton. FISH-BASED BIOMONITORING TO DETERMINE TOXIC CHARACTERISTICS OF COMPLEX CHEMICAL MIXTURES: DOCUMENTATION OF BIOREMEDIATION AT A PESTICIDE DISPOSAL SITE. *Aquat. Toxicol. (Amst.)* 19(4):329-340. 1991. FR 37(2)
[Hinton: Dep. Med., School Vet. Med., Univ. Calif., Davis 95616] *Oryzias latipes.*

92-003400 McCarty, L. S.; D. Mackay; A. D. Smith; G. W. Ozburn and D. G. Dixon. INTERPRETING AQUATIC TOXICITY QSARs: THE SIGNIFICANCE OF TOXICANT BODY RESIDUES AT THE PHARMACOLOGIC ENDPOINT. *Sci. Total Environ.* Vol. 109/110. p. 515-525. 1991. FR 37(2)
[Cantox Inc., 308-2233 Argentia Rd., Mississauga, ON, Canada L5N 2X7] *Carassius auratus.*

92-003401 McCloskey, John T. and James T. Oris. EFFECT OF WATER TEMPERATURE AND DISSOLVED OXYGEN CONCENTRATION ON THE PHOTO-INDUCED TOXICITY OF ANTHRACENE TO JUVENILE BLUEGILL SUNFISH (*LEPOMIS MACROCHIRUS*). *Aquat. Toxicol. (Amst.)* 21(3-4):145-156. 1991. FR 37(2)
[Oris: Dep. Zool., Miami Univ., Oxford, OH 45056]

TOXICOLOGY; BIOASSAYS (Continued)

92-003402 McMaster, M. E.; C. B. Portt; K. R. Munkittrick and D. G. Dixon. MILT CHARACTERISTICS, REPRODUCTIVE PERFORMANCE, AND LARVAL SURVIVAL AND DEVELOPMENT OF WHITE SUCKER EXPOSED TO BLEACHED KRAFT MILL EFFLUENT. *Ecotoxicol. Environ. Saf.* 23(1):103-117. 1992. FR 37(2)

[Munkittrick: Great Lakes Lab. Fish. & Aquat. Sci., Dep. Fish. & Oceans, 867 Lakeshore Rd., P.O. Box 5050, Burlington, ON, Canada L7R 4A6] *Catostomus commersoni.*

92-003403 McMaster, M. E.; G. J. Van Der Kraak; C. B. Portt; K. R. Munkittrick; P. K. Sibley; I. R. Smith and D. G. Dixon. CHANGES IN HEPATIC MIXED-FUNCTION OXYGENASE (MFO) ACTIVITY, PLASMA STEROID LEVELS AND AGE AT MATURITY OF A WHITE SUCKER (*CATOSTOMUS COMMERSONI*) POPULATION EXPOSED TO BLEACHED KRAFT PULP MILL EFFLUENT. *Aquat. Toxicol. (Amst.)* 21(3-4):199-218. 1991. FR 37(2)

[Munkittrick: Great Lakes Lab. Fish. & Aquat. Sci., Dep. Fish. & Oceans, 867 Lakeshore Rd., P.O. Box 5050, Burlington, ON, Canada L7R 4A6]

92-003404 Miller, D. M. and D. R. Tindall. AN ACETONITRILE-SOLUBLE TOXIC FRACTION FROM THE DINOFLAGELLATE *GAMBIERDISCUS TOXICUS. Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 64. 1988. English and Spanish poster only. FR 37(2)

[Dep. Physiol. & Bot., South. Ill. Univ., Carbondale]

92-003405 Monteiro, Luis R. and Humberto D. Lopes. MERCURY CONTENT OF SWORDFISH, *XIPHIAS GLADIUS*, IN RELATION TO LENGTH, WEIGHT, AGE, AND SEX. *Mar. Pollut. Bull.* 21(6):293-296. 1990. FR 37(2)

[Dep. Oceanogr. Pescas, Univ. Acores, P-9900 Horta, Portugal]

92-003406 Mourad, Mohamed Hassan. CARDIOVASCULAR AND RESPIRATORY CHANGES IN EEL, *ANGUILLA ANGUILLA* L. DURING EXPOSURE TO LETHAL DOSES OF LINDANE AT DIFFERENT WATER TEMPERATURES. *Acta Ichthyol. Piscatoria* 21(1):73-79. 1991. In English with Polish summ. FR 37(2)

[Inst. Oceanogr. & Fish., Alexandria, Egypt]

92-003407 Narbonne, J. F. [BIOTRANSFORMATION MECHANISMS OF ORGANIC POLLUTANTS IN MARINE ANIMALS.] *Oceanis* 17(4):449-458. 1991. In French with English summ. FR 37(2)

[Lab. Toxicol. Alimentaire, Univ. Bordeaux I, 33405 Talence Cedex, France]

92-003408 Nasci, Cristina; Giancarlo Campesan; Valentino U. Fossato; Laura Tallandini and Margherita Turchetto. INDUCTION OF CYTOCHROME *P*-450 AND MIXED FUNCTION OXYGENASE ACTIVITY BY LOW CONCENTRATIONS OF POLYCHLORINATED BIPHENYLS IN MARINE FISH *ZOSTERISESSOR OPHIOCEPHALUS* (PALL.). *Aquat. Toxicol. (Amst.)* 19(4):281-290. 1991. FR 37(2)

[Ist. Biol. Mare, C.N.R., Riva 7 Martiri 1364/a, 30122 Venice, Italy]

92-003409 Nendza, M.; B. Dittrich; A. Wenzel and W. Klein. PREDICTIVE QSAR MODELS FOR ESTIMATING ECOTOXIC HAZARD OF PLANT-PROTECTING AGENTS: TARGET AND NON-TARGET TOXICITY. *Sci. Total Environ.* Vol. 109/110. p. 527-535. 1991. FR 37(2)

[Fraunhofer-Inst. Umweltchem. & Okotoxikol., D-5948 Schmallenberg-Grafschaft, Germany]

92-003410 Newsome, Larry D.; David E. Johnson; Robert L. Lipnick; Steven J. Broderius and Christine L. Russom. A QSAR STUDY OF THE TOXICITY OF AMINES TO THE FATHEAD MINNOW. *Sci. Total Environ.* Vol. 109/110. p. 537-551. 1991. FR 37(2)

[Off. Toxic Substances (TS-796), U.S. Environ. Prot. Agency, Washington, DC 20460] *Pimephales promelas.*

92-003411 Nielsen, Gurli and Poul Bjerregaard. INTERACTION BETWEEN ACCUMULATION OF CADMIUM AND SELENIUM IN THE TISSUES OF TURBOT *SCOPHTHALMUS MAXIMUS. Aquat. Toxicol. (Amst.)* 20(4):253-266. 1991. FR 37(2)

[Bjerregaard: Ecotoxicol., Group Inst. Biol., Odense Univ. Campusvej 55, DK-5230 Odense M, Denmark]

92-003412 Nowak, B. and R. I. M. Sunderam. TOXICITY AND BIOACCUMULATION OF ENDOSULFAN TO MOSQUITOFISH, *GAMBUSIA AFFINIS* (BAIRD & GIRARD). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2327-2329. 1989. FR 37(2)

[School Biol. Sci., AO8, Univ. Sydney, Sydney, N.S.W. 2006, Australia]

92-003413 Nowak, Barbara. ACCUMULATION OF ENDOSULFAN BY CATFISH AFTER ACUTE EXPOSURE TO SUBLETHAL CONCENTRATIONS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2560-2562. 1989. FR 37(2)

[Natl. Key Cent. Teaching & Res. Aquacult., Univ. Tasmania-Launceston, P.O. Box 1214, Launceston, Tasm. 7250, Australia] *Tandanus tandanus.*

92-003414 Oikari, Aimo and Braulio Jimenez. EFFECTS OF HEPATOTOXICANTS ON THE INDUCTION OF MICROSOMAL MONOOXYGENASE ACTIVITY IN SUNFISH LIVER BY β-NAPHTHOFLAVONE AND BENZO[a]PYRENE. *Ecotoxicol. Environ. Saf.* 23(1):89-102. 1992. FR 37(2)

[Lab. Environ. Prot., Helsinki Univ. Technol., SF-02150 Espoo, Finland] *Lepomis macrochirus* x *L. cyanellus.*

TOXICOLOGY; BIOASSAYS (Continued)

92-003415 Partearroyo, M. A.; S. J. Pilling and M. N. Jones. THE LYSIS OF ISOLATED FISH (*ONCORHYNCHUS MYKISS*) GILL EPITHELIAL CELLS BY SURFACTANTS. *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):381-388. 1991. FR 37(2)

[Jones: Biomol. Organ. & Membrane Technol. Group, Dep. Biochem. & Mol. Biol., Univ. Manchester, Manchester M13 9PT, England]

92-003416 Pierce, Richard H.; R. C. Brown; M. S. Henry and K. R. Hardman. FATE AND EFFECTS: CHEMISTRY AND TOXICOLOGY. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 15. 1988. English and Spanish abstract only. FR 37(2)

[Mote Mar. Lab., Sarasota, FL]

92-003417 Playle, Richard C.; Robert W. Gensemer and D. George Dixon. COPPER ACCUMULATION ON GILLS OF FATHEAD MINNOWS: INFLUENCE OF WATER HARDNESS, COMPLEXATION AND pH OF THE GILL MICRO-ENVIRONMENT. *Environ. Toxicol. Chem.* 11(3):381-391. 1992. FR 37(2)

[Dep. Biol., Univ. Waterloo, Waterloo, ON, Canada N2L 3G1] *Pimephales promelas.*

92-003418 Poleo, Antonio B. S.; Espen Lydersen and Ivar P. Muniz. THE INFLUENCE OF TEMPERATURE ON AQUEOUS ALUMINIUM CHEMISTRY AND SURVIVAL OF ATLANTIC SALMON (*SALMO SALAR* L.) FINGERLINGS. *Aquat. Toxicol. (Amst.)*21(3-4):267-278. 1991. FR 37(2)

[Div. Gen. Physiol., Univ. Oslo, P.O. Box 1051, Blindern, N-0316 Oslo 3, Norway]

92-003419 Purdy, Rich. THE UTILITY OF COMPUTED SUPERDELOCALIZABILITY FOR PREDICTING THE LC_{50} VALUES OF EPOXIDES TO GUPPIES. *Sci. Total Environ.* Vol. 109/110. p. 553-556. 1991. FR 37(2)

[3M, Bldg. 2-3E-09, P.O. Box 33331, St. Paul, MN 55133] *Poecilia reticulata.*

92-003420 Romeo, Michele. [TOXICOLOGY OF TRACE METALS IN THE MARINE ENVIRONMENT.] *Oceanis* 17(4):383-402. 1991. In French with English summ. FR 37(2)

[Unite 303 "Mer & Sante", I.N.S.E.R.M., B.P. 3, 06230 Villefranche-sur-Mer, France]

92-003421 Roncero, V.; E. Duran; F. Soler; J. Masot and L. Gomez. MORPHOMETRIC, STRUCTURAL, AND ULTRASTRUCTURAL STUDIES OF TENCH (*TINCA TINCA* L.) HEPATOCYTES AFTER COPPER SULFATE ADMINISTRATION. *Environ. Res.* 57(1):45-58. 1992. FR 37(2)

[Dep. Histol. & Pathol. Anat., Fac. Vet. Sci., 10071-Caceres, Spain]

92-003422 Roszell, L. E. and R. S. Anderson. INFLUENCE OF PENTACHLOROPHENOL (PCP) ON THE CHEMILUMINESCENT RESPONSE OF *FUNDULUS HETEROCLITUS* PHAGOCYTES. *Am. Zool.* 31(5):130A. 1991. Abstract only. FR 37(2)

[Univ. Md., Syst. Program Toxicol., Chesapeake]

92-003423 Saito, Shoji; Akira Tanoue and Masatoshi Matsuo. APPLICABILITY OF THE i/o-CHARACTERS TO A QUANTITATIVE DESCRIPTION OF BIOCONCENTRATION OF ORGANIC CHEMICALS IN FISH. *Chemosphere* 24(1):81-87. 1992. FR 37(2)

[Environ. Health Sci. Lab., Sumitomo Chem. Co., Ltd., 4-2-1, Takatsukasa, Takarazuka, Hyogo 665, Japan]

92-003424 Saito, Shoji; Akira Tanoue and Masatoshi Matsuo. THE i/o-CHARACTERS TO EVALUATE n-OCTANOL/WATER PARTITION COEFFICIENT IN BIOCONCENTRATION OF ORGANIC CHEMICALS IN FISH. *Chemosphere* 24(1):89-95. 1992. FR 37(2)

[Environ. Health Sci. Lab., Sumitomo Chem. Co., Ltd., 4-2-1, Takatsukasa, Takarazuka, Hyogo 665, Japan]

92-003425 Sakr, Saber A. and Samia A. Gabr. ULTRASTRUCTURAL CHANGES INDUCED BY DIAZINON AND NEOPYBUTHRIN IN SKELETAL MUSCLES OF *TILAPIA NILOTICA*. *Bull. Environ. Contam. Toxicol.* 48(3):467-473. 1992. FR 37(2)

[Zool. Dep., Fac. Sci., Menoufia Univ., Shebin El-kom, Egypt]

92-003426 Sakthivel, M.; K. Sampath and T. J. Pandian. SUBLETHAL EFFECTS OF TEXTILE DYE STUFF EFFLUENT ON SELECTED OXIDATIVE ENZYMES AND TISSUE RESPIRATION OF *CYPRINUS CARPIO* (LINN.). *Indian J. Exp. Biol.* 29(10):979-981. 1991. FR 37(2)

[Sampath: Zool. Dep., V.O.C. Coll., Tuticorin-628 008, India]

92-003427 Saxena, M. P.; K. Gopal; W. Jones and P. K. Ray. IMMUNE RESPONSES TO *AEROMONAS HYDROPHILA* IN CAT FISH (*HETEROPNEUSTIS FOSSILIS*) EXPOSED TO CADMIUM AND HEXACHLOROCYCLOHEXANE. *Bull. Environ. Contam. Toxicol.* 48(2):194-201. 1992. FR 37(2)

[Gopal: Ind. Toxicol. Res. Cent., Post Box 80, M.G. Marg, Lucknow-226 001 India]

92-003428 Schlenk, Daniel; David A. Erickson; John J. Lech and Donald R. Buhler. THE DISTRIBUTION, ELIMINATION, AND *IN VIVO* BIOTRANSFORMATION OF ALDICARB IN THE RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Fund. Appl. Toxicol.* 18(1):131-136. 1992. FR 37(2)

[Buhler: Toxicol. Program & Dep. Agric. Chem., Oreg. State Univ., Corvallis]

TOXICOLOGY; BIOASSAYS (Continued)

92-003429 Segner, Helmut; Harald Gebhardt; Michael Unnenbach; Roland Marthaler and Andreas Ness. INFLUENCE OF LOW pH ON BROWN TROUT, *SALMO TRUTTA*. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2470-2473. 1989. FR 37(2)

[Zool. II, Univ. Karlsruhe, Kaiserstr. 12, D-7500 Karlsruhe, Germany]

92-003430 Singh, P. B. IMPACT OF MALATHION AND γ-BHC ON LIPID METABOLISM IN THE FRESHWATER FEMALE CATFISH, *HETEROPNEUSTES FOSSILIS*. *Ecotoxicol. Environ. Saf.* 23(1):22-32. 1992. FR 37(2)

[Reprod. Toxicol. Lab., Postgrad. Dep. Zool., T. D. Coll., Jaunpur (U.P.), India]

92-003431 Sreedevi, P.; A. Suresh; B. Sivaramakrishna; B. Prabhavathi and K. Radhakrishnaiah. BIOACCUMULATION OF NICKEL IN THE ORGANS OF THE FRESHWATER FISH, *CYPRINUS CARPIO*, AND THE FRESHWATER MUSSEL, *LAMELLIDENS MARGINALIS*, UNDER LETHAL AND SUBLETHAL NICKEL STRESS. *Chemosphere* 24(1):29-36. 1992. FR 37(2)

[Dep. Zool., Sri Krishnadevaraya Univ., Anantapur-515 003, A.P., India]

92-003432 Stanek, Zdenek; Milan Penaz and Evzen Wohlgemuth. ACCUMULATION AND KINETICS OF ^{90}Sr IN FISHES AND OTHER COMPONENTS OF AN ARTIFICIAL AQUATIC SYSTEM. *Folia Zool.* 39(4):375-383. 1990. FR 37(2)

[Water Res. Inst. Prague, Branch Brno, Drevarska 12, 602 00 Brno, Czechoslovakia] *Cyprinus carpio.*

92-003433 Steward, A. Ruth; Chithan Kandaswami; S. Chidambaram; Craig Ziper; Joel P. Rutkowski and Harish C. Sikka. DISPOSITION AND METABOLIC FATE OF BENZO[a]PYRENE IN THE COMMON CARP. *Aquat. Toxicol. (Amst.)* 20(4):205-218. 1991. FR 37(2)

[Sikka: Div. Environ. Toxicol. & Chem., SUNY Coll., 1300 Elmwood Ave., Buffalo, NY 14222] *Cyprinus carpio.*

92-003434 Sukumar, A. and P. R. Karpagaganapathy. PESTICIDE-INDUCED ATRESIA IN OVARY OF A FRESH WATER FISH, *COLISA LALIA* (HAMILTON-BUCHANAN). *Bull. Environ. Contam. Toxicol.* 48(3):457-462. 1992. FR 37(2)

[Dep. Zool., Mahatma Gandhi Gov. Arts Coll., New Mahe-673 311, India]

92-003435 Szabo, A.; J. Nemcsok; B. Asztalos; Z. Rakonczay; P. Kasa and Le Huu Hieu. THE EFFECT OF PESTICIDES ON CARP (*CYPRINUS CARPIO* L). ACETYLCHOLINESTERASE AND ITS BIOCHEMICAL CHARACTERIZATION. *Ecotoxicol. Environ. Saf.* 23(1):39-45. 1992. FR 37(2)

[Dep. Biochem., Jozsef Attila Univ., P.O. Box 533, 6701 Szeged, Hungary]

92-003436 Tamaki, S. and W. T. Frankenberger, Jr. ENVIRONMENTAL BIOCHEMISTRY OF ARSENIC. *Rev. Environ. Contam. Toxicol.* Vol. 124. p. 79-110. 1992. FR 37(2)

[Dep. Soil & Environ. Sci., Univ. Calif., Riverside 92521]

92-003437 Thorhaug, A. DISPERSED OIL EFFECTS ON MANGROVES, SEAGRASSES AND CORALS IN THE WIDER CARIBBEAN. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 17. 1988. English and Spanish abstract only. FR 37(2)

[Fla. Int. Univ., Miami]

92-003438 Tindall, D. R. and D. M. Miller. TOXINS FROM *OSTREOPSIS LENTICULARIS*, A DINOFLAGELLATE COMMON TO CIGUATERA-ENDEMIC REGIONS OF THE CARIBBEAN AND TROPICAL ALTANTIC. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 69. 1988. English and Spanish poster only. FR 37(2)

[Dep. Physiol. & Bot., South. Ill. Univ., Carbondale]

92-003439 Tulasi, S. J.; P. U. M. Reddy and J. V. Ramana Rao. ACCUMULATION OF LEAD AND EFFECTS ON TOTAL LIPIDS AND LIPID DERIVATIVES IN THE FRESHWATER FISH *ANABAS TESTUDINEUS* (BLOCH). *Ecotoxicol. Environ. Saf.* 23(1):33-38. 1992. FR 37(2)

[Dep. Zool., Osmania Univ., Hyderbad-500 007, India]

92-003440 van den Heuvel, M. R.; L. S. McCarty; R. P. Lanno; B. E. Hickie and D. G. Dixon. EFFECT OF TOTAL BODY LIPID ON THE TOXICITY AND TOXICOKINETICS OF PENTACHLOROPHENOL IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquat. Toxicol. (Amst.)* 20(4):235-252. 1991. FR 37(2)

[Univ. Waterloo, Dep. Biol., Waterloo, ON, Canada N2L 3G1]

92-003441 Van Leeuwen, Cees J.; Peter T. J. Van Der Zandt; Tom Aldenberg, Henk J. M. Verhaar and Joop L. M. Hermens. APPLICATION OF QSARs, EXTRAPOLATION AND EQUILIBRIUM PARTITIONING IN AQUATIC EFFECTS ASSESSMENT. I. NARCOTIC INDUSTRIAL POLLUTANTS. *Environ. Toxicol. Chem.* 11(2):267-282. 1992. FR 37(2)

[Dir.-Gen. Environ. Prot., P.O. Box 450, 2260 MB Leidschendam, Netherlands] *Pimephales promelas* and *Brachydanio rerio.*

TOXICOLOGY; BIOASSAYS (Continued)

92-003442 Van Veld, Peter A.; Unchu Ko; Wolfgang K. Vogelbein and Donna J. Westbrook. GLUTATHIONE S-TRANSFERASE IN INTESTINE, LIVER AND HEPATIC LESIONS OF MUMMICHOG *(FUNDULUS HETEROCLITUS)* FROM A CREOSOTE-CONTAMINATED ENVIRONMENT. *Fish Physiol. Biochem.* 9(4):369-376. 1991. FR 37(2)

[Coll. William & Mary, School Mar. Sci., Inst. Mar. Sci., Gloucester Point, VA 23062]

92-003443 Vindimian, Eric; Philippe Namour; Bernard Migeon and Jeanne Garric. IN SITU POLLUTION INDUCED CYTOCHROME *P*450 ACTIVITY OF FRESHWATER FISH: BARBEL (*BARBUS BARBUS*), CHUB (*LEUCISCUS CEPHALUS*) AND NASE (*CHONDROSTOMA NASUS*). *Aquat. Toxicol. (Amst.)* 21(3-4):255-266. 1991. FR 37(2)

[Lab. Ecotoxicol., Cent. Natl. Machinisme Agric., Genie Rural, Eaux & For., 3 quai Chauveau, F69336 Lyon Cedex 9, France]

92-003444 Vuorinen, Pekka J. and Marja Vuorinen. EFFECTS OF LONG-TERM PRESPAWNING ACID/ALUMINIUM EXPOSURE ON WHITEFISH (*COREGONUS WARTMANNI*) REPRODUCTION AND BLOOD AND PLASMA PARAMETERS. *Finn. Fish. Res.* Vol. 12. p. 125-133. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-003445 Walker, Mary K. and Richard E. Peterson. POTENCIES OF POLYCHLORINATED DIBENZO-*p*-DIOXIN, DIBENZOFURAN, AND BIPHENYL CONGENERS, RELATIVE TO 2,3,7,8-TETRACHLORODIBENZO-*p*-DIOXIN, FOR PRODUCING EARLY LIFE STAGE MORTALITY IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *Aquat. Toxicol. (Amst.)* 21(3-4):219-238. 1991. FR 37(2)

[2630 Fanta Reed Rd., Natl. Fish. Res. Lab., U.S. Fish & Wildl. Serv., La Crosse, WI 54602]

92-003446 Walker, W. W.; W. E. Hawkins and R. M. Overstreet. SUB-LETHAL EFFECTS IN MEDAKA (*ORYZIAS LATIPES*) EXPOSED TO ETHYLENE DIBROMIDE. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 19. 1988. English and Spanish abstract only. FR 37(2)

[Gulf Coast Res. Lab., Ocean Springs, MS]

92-003447 Wang, Yei-Shung; Ching-Guang Jaw; Hung-Chi Tang; Tain-Sheng Lin and Yuh-Lin Chen. ACCUMULATION AND RELEASE OF HERBICIDES BUTACHLOR, THIOBENCARB, AND CHLOMETHOXYFEN BY FISH, CLAM, AND SHRIMP. *Bull. Environ. Contam. Toxicol.* 48(3):474-480. 1992. FR 37(2)

[Dep. Agric. Chem., Natl. Taiwan Univ., Taipei, Taiwan 10764] *Cyprinus carpio, Tilapia mossambica, Misgurnus anguillicaudatus, Ctenopharyngodon idella, Anguilla japonica,* and *Aristichthys nobilis.*

92-003448 Wauchope, R. D.; T. M. Buttler; A. G. Hornsby; P. W. M. Augustijn-Beckers and J. P. Burt. THE SCS/ARS/CES PESTICIDE PROPERTIES DATABASE FOR ENVIRONMENTAL DECISION-MAKING. *Rev. Environ. Contam. Toxicol.* Vol. 123. 164p. 1992. FR 37(2)

[U.S. Agric. Res. Serv., Tifton, GA 31793]

92-003449 Weirich, C. R.; J. R. Tomasso and T. I. J. Smith. TOXICITY OF AMMONIA AND NITRITE TO HYBRID STRIPED BASS (WHITE BASS, *MORONE CHRYSOPS* X STRIPED BASS, *M. SAXATILIS*): EFFECT OF CALCIUM. *J. World Aquacult. Soc.* 22(3):64A. 1991. Abstract only. FR 37(2)

[Dep. Aquacult., Fish., & Wildl., Clemson Univ., Clemson, SC 29634]

92-003450 Welling, W. and J. W. de Vries. BIOCONCENTRATION KINETICS OF THE ORGANOPHOSPHORUS INSECTICIDE CHLORPYRIFOS IN GUPPIES (*POECILIA RETICULATA*). *Ecotoxicol. Environ. Saf.* 23(1):64-75. 1992. FR 37(2)

[Dep. Aquat. Syst., DLO Winand Staring Cent. Integrated Land, Soil, & Water Res., P.O. Box 125, 6700 AC Wageningen, Netherlands]

92-003451 Wesson, L. J.; R. V. Hunt; H. C. Freeman and J. F. Klaverkamp. RESPONSES OF ATLANTIC SALMON (*SALMO SALAR*) TO ACIDIC RIVERS IN NOVA SCOTIA AND TO VARIOUS DIETS: METALS AND METALLOTHIONEIN IN LIVER AND KIDNEY. *Comp. Biochem. Physiol. C Comp. Pharmacol. Toxicol.* 100(3):657-663. 1991. FR 37(2)

[Dep. Fish. & Oceans, Freshwater Inst., 501 University Crescent, Winnipeg, MB, Canada R3T 2N6]

92-003452 Yarzhombek, A. A.; A. Ye. Mikulin and A. N. Zhdanova. TOXICITY OF SUBSTANCES IN RELATION TO FORM OF EXPOSURE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(7):99-106. 1991. FR 37(2)

[All-Union Correspondence Inst. Food Ind., Moscow, USSR] *Cyprinus carpio.*

92-003453 Zok, S.; G. Gorge; W. Kalsch and R. Nagel. BIOCONCENTRATION, METABOLISM AND TOXICITY OF SUBSTITUTED ANILINES IN THE ZEBRAFISH (*BRACHYDANIO RERIO*). *Sci. Total Environ.* Vol. 109/110. p. 411-421. 1991. FR 37(2)

[Inst. Zool., Johannes-Gutenberg-Univ., D-6500 Mainz, Germany]

RESEARCH AND MANAGEMENT-GENERAL

92-003454 Allen, Mike; Milli Hayman; Elise Irwin; Morgan McCosh and Mike Moberly. THE STUDENTS' PERSPECTIVE. *Fisheries (Bethesda)* 17(1):44-45. 1992. FR 37(2)

92-003455 Berkes, Fikret. NATIVE SUBSISTENCE FISHERIES: A SYNTHESIS OF HARVEST STUDIES IN CANADA. *Arctic* 43(1):35-42. 1990. FR 37(2)
[Inst. Urban & Environ. Studies, Brock Univ., St. Catharines, ON, Canada L2S 3A1]

92-003456 Bugenyi, F. W. B. ECOTONES IN A CHANGING ENVIRONMENT: MANAGEMENT OF ADJACENT WETLANDS FOR FISHERIES PRODUCTION IN THE TROPICS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2547-2551. 1989. FR 37(2)
[Uganda Freshwater Fish. Res. Organ., P.O. Box 343, Jinja, Uganda]

92-003457 Department of Agriculture Northern Ireland. REPORT ON THE SEA AND INLAND FISHERIES OF NORTHERN IRELAND 1990. *Rep. Sea Inland Fish. North. Irel.* 28p. 1991. FR 37(2)

92-003458 Dunson, William A. and Joseph Travis. THE ROLE OF ABIOTIC FACTORS IN COMMUNITY ORGANIZATION. *Am. Nat.* 138(5):1067-1091. 1991. FR 37(2)
[Dep. Biol., 208 Mueller Lab., Pa. State Univ., University Park 16802-5301]

92-003459 Flagg, L. N. and T. S. Squiers, Jr. MANAGEMENT, ENHANCEMENT, AND RESTORATION OF STRIPED BASS IN THE STATE OF MAINE, U.S.A. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 23-28. 1991. FR 37(2)
[Dep. Mar. Resour., State House Stn. #21, Augusta, ME 04333] *Morone saxatilis* in Maine.

92-003460 Hooper, W. C. STRIPED BASS MANAGEMENT IN NEW BRUNSWICK. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 29-40. 1991. FR 37(2)
[New Brunswick Dep. Nat. Resour. & Energy, Fish & Wildl. Branch, P.O. Box 6000, Fredericton, NB, Canada E3B 5H1] *Morone saxatilis* in Canada.

92-003461 Meyers, Gary D. DIFFERENT SIDES OF THE SAME COIN: A COMPARATIVE VIEW OF INDIAN HUNTING AND FISHING RIGHTS IN THE UNITED STATES AND CANADA. *UCLA J. Environ. Law Policy* 10(1):67-121. 1991. FR 37(2)
[Murdoch Univ. School Econ., Commerce, & Law, Perth, WA, Australia]

92-003462 Miller, Robert Rush; Clark Hubbs and Frances H. Miller. ICHTHYOLOGICAL EXPLORATION OF THE AMERICAN WEST: THE HUBBS-MILLER ERA, 1915-1950. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 19-41. 1991. FR 37(2)
[Univ. Mich., Mus. Zool., Ann Arbor 48109]

92-003463 Minckley, W. L.; Gary K. Meffe and David L. Soltz. CONSERVATION AND MANAGEMENT OF SHORT-LIVED FISHES: THE CYPRINODONTOIDS. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 247-282. 1991. FR 37(2)
[Ariz. State Univ., Dep. Zool., Tempe 85287]

92-003464 Moyle, Peter B. and Georgina M. Sato. ON THE DESIGN OF PRESERVES TO PROTECT NATIVE FISHES. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckly and James E. Deacon, editors.* p. 155-169. 1991. FR 37(2)
[Univ. Calif., Dep. Wildl. & Fish. Biol., Davis 95616]

92-003465 Naslund, Ingemar. FISHERY MANAGEMENT IN SWEDEN. *Freshwater Catch* No. 46. p. 21-24. 1991. FR 37(2)

92-003466 Peterson, R. H., editor. PROCEEDINGS OF A WORKSHOP ON BIOLOGY AND CULTURE OF STRIPED BASS (*MORONE SAXATILIS*). *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. 66p. 1991. FR 37(2)
[Dep. Fish. Oceans Biol. Stn., St. Andrews, NB, Canada E0G 2X0]

92-003467 Pister, Edwin Philip. THE DESERT FISHES COUNCIL: CATALYST FOR CHANGE. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 55-68. 1991. FR 37(2)
[Desert Fishes Council, P.O. Box 337, Bishop, CA 93515]

92-003468 Taylor, D. Scott; Scott A. Ritchie and Eric Johnson. THE KILLIFISH *RIVULUS MARMORATUS*: A POTENTIAL BIOCONTROL AGENT FOR *AEDES TAENIORHYNCHUS* AND BRACKISH WATER *CULEX*. *J. Am. Mosq. Control Assoc.* 8(1):80-83. 1992. FR 37(2)
[Brevard Mosquito Control Dis., Titusville, FL 32781]

RESEARCH AND MANAGEMENT-GENERAL (Continued)

92-003469 Vanden Bossche, J. P. and G. M. Bernacsek. SOURCE BOOK FOR THE INLAND FISHERY RESOURCES OF AFRICA VOL. 3. *CIFA (Comm. Inland Fish. Afr.) Tech. Pap.* 18(3):219p. 1991. Available at $30.00 (paper) from UNIPUB, 4611-F Assembly Dr., Lanham, MD 20706-4391. FR 37(2)
[Bois Gilet, 86, 5120 Vezin, Belgium]

92-003470 Wieser, Wolfgang; Fritz Schiemer; Alfred Goldschmidt and Kurt Kotrschal, editors. ENVIRONMENTAL BIOLOGY OF EUROPEAN CYPRINIDS. SOME PAPERS FROM THE WORKSHOP ON "THE ENVIRONMENTAL BIOLOGY OF CYPRINIDS" HELD AT THE INSTITUTE OF ZOOLOGY, UNIVERSITY OF SALZBURG, AUSTRIA, IN SEPTEMBER 1989. *Environ. Biol. Fishes* 33(1-2):227p. 1992. FR 37(2)
[Inst. Zool., Univ. Innsbruck, Technikerstr. 25, A-6020, Innsbruck, Austria]

92-003471 Williams, Jack E. PRESERVES AND REFUGES FOR NATIVE WESTERN FISHES: HISTORY AND MANAGEMENT. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 171-189. 1991. FR 37(2)
[U.S. Bur. Land Manage., Div. Wildl. & Fish., 18th & C St., N.W., Washington, DC 20240]

ADMINISTRATION AND PLANNING

92-003472 Atlantic Salmon Federation. SALMON GENETICS RESEARCH PROGRAM ANNUAL REPORT 1990/1991. *Atl. Salmon Fed. Annu. Rep.* 38p. 1991. FR 37(2)
Salmo salar.

92-003473 International Pacific Halibut Commission. INTERNATIONAL PACIFIC HALIBUT COMMISSION ANNUAL REPORT. *Int. Pac. Halibut Comm. Annu. Rep.* 1990. 52p. 1991. FR 37(2)
[P.O. Box 95009, Seattle, WA 98145-2009]

HABITAT ALTERATIONS

92-003474 Binns, N. Allen and Mel Oberholtzer. RESTORING SEDIMENT DAMAGED TROUT HABITAT IN HOG PARK CREEK, WYOMING. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 31-37. 1990. FR 37(2)
[Game & Fish Dep., 260 Buena Vista, Lander, WY 82520] *Salmo trutta* and *Salvelinus fontinalis.*

92-003475 Bjornn, T. C.; S. C. Kirking and W. R. Meehan. RELATION OF COVER ALTERATIONS TO THE SUMMER STANDING CROP OF YOUNG SALMONIDS IN SMALL SOUTHEAST ALASKA STREAMS. *Trans. Am. Fish. Soc.* 120(5):562-570. 1991. FR 37(2)
[Coop. Fish & Wildl. Res. Unit, Univ. Idaho, Moscow 83843] *Oncorhynchus kisutch, O. mykiss,* and *Salvelinus malma.*

92-003476 Boeters, R. E. A. M.; H. J. Verheij and M. van der Wal. ENVIRONMENT-FRIENDLY BANK PROTECTIONS. *Delft Hydraulics Publ.* No. 464. 6p. 1991. FR 37(2)
[Rijkswaterst., Road & Hydraulics Eng. Div., Delft, Netherlands]

92-003477 Detenbeck, Naomi E.; Philip W. DeVore; Gerald J. Niemi and Ann Lima. RECOVERY OF TEMPERATE-STREAM FISH COMMUNITIES FROM DISTURBANCE: A REVIEW OF CASE STUDIES AND SYNTHESIS OF THEORY. *Environ. Manage.* 16(1):33-53. 1992. FR 37(2)
[Nat. Resour. Res. Inst., Univ. Minn., Duluth 55811]

92-003478 Ducey, James E. DITCHING OF WETLANDS IN THE NEBRASKA SANDHILLS: A CASE STUDY OF GRANT COUNTY. *Trans. Nebr. Acad. Sci.* Vol. 18. p. 1-9. 1991. FR 37(2)
[1210 S. 25th St., Lincoln, NE 68502]

92-003479 Ewing, Michael S. TURBIDITY CONTROL AND FISHERIES ENHANCEMENT IN A BOTTOMLAND HARDWOOD BACKWATER SYSTEM IN LOUISIANA (U.S.A.). *Regul. Rivers Res. Manage.* 6(2):87-99. 1991. FR 37(2)
[Dep. Wildl. & Fish., P.O. Box 426, Ferriday, LA 71334] Data for 22 species.

92-003480 Hartzler, James R.; Robert A. Bachman; Donald L. Baylor; Robert L. Butler and Kenneth Ersbak. EFFECTS OF SILTATION AND TEMPERATURE ON BROWN TROUT IN THE PAINT BRANCH WATERSHED (MD). *Trout. Comm. South. Div. Am. Fish. Soc.* p. 21-30. 1990. FR 37(2)
[Aquat. Resour. Consult., RD 2 Box 2562, Saylorsburg, PA 18353] *Salmo trutta* in Maryland.

92-003481 Hostetler, S. W. ANALYSIS AND MODELING OF LONG-TERM STREAM TEMPERATURES ON THE STEAMBOAT CREEK BASIN, OREGON: IMPLICATIONS FOR LAND USE AND FISH HABITAT. *Water Resour. Bull.* 27(4):637-647. 1991. FR 37(2)
[Res. Hydrol., USGS, Natl. Cent. Atmos. Res., P.O. Box 3000ML, Boulder, CO 80307-3000] *Oncorhynchus mykiss.*

92-003482 Lindeman, K. C. COSTAL CONSTRUCTION, LARVAL SETTLEMENT, AND EARLY JUVENILE HABITAT USE IN REEF AND ESTUARINE FISHES OF SOUTHEAST FLORIDA. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 63. 1988. English and Spanish poster only. FR 37(2)
[Div. Biol. & Living Resour., Rosensteal School Mar. & Atmos. Sci., Univ. Miami, FL]

HABITAT ALTERATIONS (Continued)

92-003483 Lubinski, K. S.; G. Carmody; D. Wilcox and B. Drazkowski. DEVELOPMENT OF WATER LEVEL REGULATION STRATEGIES FOR FISH AND WILDLIFE, UPPER MISSISSIPPI RIVER SYSTEM. *Regul. Rivers Res. Manage.* 6(2):117-124. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Environ. Manage. Tech. Cent., 575 Lester Dr., Onalaska, WI 54650]

92-003484 Morgan, Raymond P. III; Richard E. Jacobsen; Stephen B. Weisberg; Lizabeth A. McDowell and Harold T. Wilson. EFFECTS OF FLOW ALTERATION ON BENTHIC MACROINVERTBRATE COMMUNITIES BELOW THE BRIGHTON HYDROELECTRIC DAM. *J. Freshwater Ecol.* 6(4):419-429. 1991. FR 37(2)
[Univ. Md., Cent. Environ. & Estuarine Studies, Appalachian Environ. Lab., Frostburg 21532]

92-003485 Owen, M. GROUNDWATER ABSTRACTION AND RIVER FLOWS. *J. Inst. Water Environ. Manage.* 5(6):697-702. 1991. FR 37(2)

92-003486 Penaz, Milan and Ilona Stouracova. EFFECT OF HYDROELECTRIC DEVELOPMENT ON POPULATION DYNAMICS OF *BARBUS BARBUS* IN THE RIVER JIHLAVA. *Folia Zool.* 40(1):75-84. 1991. FR 37(2)
[Inst. Syst. & Ecol. Biol., Czechoslovak Acad. Sci., Kvetna 8, 603 65 Brno, Czechoslovakia]

92-003487 Pringle, Catherine M. U.S.-ROMANIAN ENVIRONMENTAL RECONNAISSANCE OF THE DANUBE DELTA. *Conserv. Biol.* 5(4):442-445. 1991. FR 37(2)
[Cent. Environ. & Sect. Ecol. & Syst., Cornell Univ., Ithaca, NY 14853]

92-003488 Raphals, Philip. THE HIDDEN COST OF CANADA'S CHEAP POWER. *New Sci.* 133(1808):50-54. 1992. FR 37(2)

92-003489 Rochow, T. F. and P. Rhinesmith. THE EFFECTS OF GROUNDWATER WITHDRAWAL AND URBANIZATION ON THE HEALTH OF ISOLATED FRESHWATER WETLANDS IN SOUTHWEST FLORIDA. *Fla. Sci.* 55(Suppl. 1):17. 1992. Abstract only. FR 37(2)
[Southwest Water Manage. Dist., 2379 Broad St., Brooksville, FL 34609]

92-003490 Rolston, Holmes III. FISHES IN THE DESERT: PARADOX AND RESPONSIBILITY. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 93-108. 1991. FR 37(2)
[Colo. State Univ., Dep. Philosophy, Fort Collins 80523] *Cyprinodon.*

92-003491 Schneider, Friederike I. and Kenneth H. Mann. RAPID RECOVERY OF FAUNA FOLLOWING SIMULATED ICE RAFTING IN A NOVA SCOTIAN SEAGRASS BED. *Mar. Ecol. Prog. Ser.* 78(1):57-70. 1991. FR 37(2)
[Mann: Dep. Fish. & Oceans, Habitat Ecol. Div., Bedford Inst. Oceanogr., P.O. Box 1006, Dartmouth, NS, Canada B3H 4J1]

92-003492 Stein, M. GLOBAL WARMING INDUCED CHANGES AND THEIR IMPLICATIONS TO FISHERIES IN THE NORTH ATLANTIC. *Northwest Atl. Fish. Organ. Sci. Counc. Stud.* No. 15. p. 19-24. 1991. FR 37(2)
[Inst. Seefisch., Bundesforschungsanstalt Fishch., Palmaille 9, D-2000 Hamburg 50, Germany] *Gadus morhua.*

92-003493 Tyus, H. M. and B. D. Winter. HYDROPOWER DEVELOPMENT. *Fisheries (Bethesda)* 17(1):30-32. 1992. FR 37(2)

92-003494 Woynarovich, E. THE HYDROELECTRIC POWER PLANTS AND THE FISH FAUNA. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2531-2536. 1989. FR 37(2)
[Attila ut 121, H-1012 Budapest, Hungary]

HARVEST, CREEL CENSUS, ETC.

92-003495 Baker, Timothy T.; John A. Wilcock and Betsy W. McCracken. STOCK ASSESSMENT AND MANAGEMENT OF PACIFIC HERRING IN PRINCE WILLIAM SOUND, ALASKA, 1990. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-22. 64p. 1991. FR 37(2)
[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Clupea pallasi.*

92-003496 Barrett, Bruce M. and Frederick M. Thompson. CHIGNIK MANAGEMENT AREA SALMON CATCH, ESCAPEMENT, AND RUN STATISTICS, 1988. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-07. 35p. 1991. FR 37(2)
[Dep. Fish & Game, Div. Commer. Fish., 211 Mission Rd., Kodiak, AK 99615] *Oncorhynchus tshawytscha, O. nerka, O. gorbuscha, O. keta,* and *O. kisutch* in Alaska.

92-003497 Brandon, M. MARINE RECREATIONAL FISHING STATISTICS OF ST. THOMAS, U.S. VIRGIN ISLANDS, JANUARY TO OCTOBER, 1987. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 30. 1988. English and Spanish abstract only. FR 37(2)
Tetrapturus albidus, Makaira nigricans, and *Istiophorus platypterus.*

HARVEST, CREEL CENSUS, ETC. (Continued)

92-003498 Connelly, Nancy A. and Tommy L. Brown. NET ECONOMIC VALUE OF THE FRESHWATER RECREATIONAL FISHERIES OF NEW YORK. *Trans. Am. Fish. Soc.* 120(6):770-775. 1991. FR 37(2)

[Dep. Nat. Resour., Cornell Univ., Ithaca, NY 14853]

92-003499 Crawford, Drew L. and Ellen M. Simpson. CATCH AND ESCAPEMENT STATISTICS FOR COPPER RIVER, BERING RIVER, AND PRINCE WILLIAM SOUND SALMON, 1988. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-06. 193p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., 333 Raspberry Rd., Anchorage, AK 99518-1599] *Oncorhynchus tshawytscha, O. nerka, O. gorbuscha, O. keta,* and *O. kisutch* in Alaska.

92-003500 Fogarty, Michael J.; Andrew A. Rosenberg and Michael P. Sissenwine. A CASE STUDY OF GEORGES BANK HADDOCK. *Environ. Sci. Technol.* 26(3):440-447. 1992. FR 37(2)

[NOAA, NMFS, Woods Hole, MA 02543] *Melanogrammus aeglefinus* in the United States.

92-003501 Gilhousen, Philip. ESTIMATION OF FRASER RIVER SOCKEYE ESCAPEMENTS FROM COMMERCIAL HARVEST DATA, 1892-1944. *Int. Pac. Salmon Fish. Comm. Bull.* No. 27. 114p. 1992. FR 37(2)

Oncorhynchus nerka.

92-003502 Green, Trellis G. IMPORTANCE OF FISH CONSUMPTION TO SPORT FISHERMEN: AN ECONOMIC ANALYSIS. *Fisheries (Bethesda)* 16(6):13-16, 18-19. 1991. FR 37(2)

[Dep. Econ. & Int. Business, Univ. South. Miss., Hattiesburg 39406-5072]

92-003503 Jessop, B. M. THE HISTORY OF THE STRIPED BASS FISHERY IN THE BAY OF FUNDY. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 13-21. 1991. FR 37(2)

[Dep. Fish. & Oceans, P.O. Box 550, Halifax, NS, Canada B3J 2S7] *Morone saxatilis* in Canada.

92-003504 Jones, Ronald D. A REVIEW OF REGULATIONS AND ANGLER CATCH CHARACTERISTICS ON SELECTED YELLOWSTONE NATIONAL PARK BROWN TROUT STREAMS. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 98-103. 1990. FR 37(2)

[U.S. Fish & Wildl. Serv., Yellowstone Fish Assistance Off., P.O. Box 184, Yellowstone Natl. Park, WY 82190] *Salmo trutta* in Wyoming.

92-003505 Matlock, Gary C. THE EAST MATAGORDA BAY EXPERIENCE: THE SAGA CONTINUES. *Fisheries (Bethesda)* 16(6):20-22. 1991. FR 37(2)

[Parks & Wildl. Dep., 4200 Smith School Rd., Austin, TX 78744]

92-003506 McCarty, C. E. and Barbara R. Gregg. EARLY PREDICTION OF POND HARVEST SUCCESS RATE. *Aquaculture* 102(1/2):89-94. 1992. FR 37(2)

[Parks & Wildl. Dep., Fish. Div., Fish Hatcheries, 4200 Smith School Rd., Austin, TX 78744] *Sciaenops ocellatus.*

92-003507 McCullough, James N. ALASKA PENINSULA AND ALEUTIAN ISLANDS MANAGEMENT AREAS SALMON CATCH, ESCAPEMENT, AND RUN STATISTICS, 1988. *Alsk. Dep. Fish Game Tech. Fish. Rep.* No. 91-08. 89p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., 211 Mission Rd., Kodiak, AK 99615] *Oncorhynchus tshawytscha, O. nerka, O. gorbuscha, O. keta,* and *O. kisutch.*

92-003508 Parks, Wesley W. A REVIEW OF INDIAN OCEAN FISHERIES FOR SKIPJACK TUNA, *KATSUWONUS PELAMIS,* AND YELLOWFIN TUNA, *THUNNUS ALBACARES. Mar. Fish. Rev.* 53(1):1-9. 1991. FR 37(2)

[Southwest Fish. Sci. Cent., NMFS, NOAA, P.O. Box 271, La Jolla, CA 92038]

REGULATIONS

92-003509 Billingsley, Craig W. and Bruce L. Haase. EFFECTS OF CATCH-AND-RELEASE REGULATIONS ON AN URBAN WILD BROWN TROUT FISHERY. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 104-113. 1990. FR 37(2)

[Bur. Fish., Fish Comm., Bushkill, PA 18324] *Salmo trutta* in Pennsylvania.

92-003510 Clark, Joy; Wade Griffin; Jerry Clark and James Richardson. SIMULATED ECONOMIC IMPACT OF TED REGULATIONS ON SELECTED VESSELS IN THE TEXAS SHRIMP FISHERY. *Mar. Fish. Rev.* 53(2):1-8. 1991. FR 37(2)

[Econ. Dep., Auburn Univ., Montgomery, AL 36193-0401]

92-003511 Colvin, Michael A. EVALUATION OF MINIMUM-SIZE LIMITS AND REDUCED DAILY LIMITS ON THE CRAPPIE POPULATIONS AND FISHERIES IN FIVE LARGE MISSOURI RESERVOIRS. *N. Am. J. Fish. Manage.* 11(4):585-597. 1991. FR 37(2)

[Dep. Conserv., 1110 S. College Ave., Columbia, MO 65201] *Pomoxis annularis.*

REGULATIONS (Continued)

92-003512 Hansen, Michael J.; Michael D. Staggs and Michael H. Hoff. DERIVATION OF SAFETY FACTORS FOR SETTING HARVEST QUOTAS ON ADULT WALLEYES FROM PAST ESTIMATES OF ABUNDANCE. *Trans. Am. Fish. Soc.* 120(5):620-628. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent.-Great Lakes, 1451 Green Rd., Ann Arbor, MI 48105] *Stizostedion vitreum* in Wisconsin.

92-003513 Hunt, Robert L. EVALUATION OF A CATCH AND RELEASE FISHERY FOR BROWN TROUT REGULATED BY AN UNPROTECTED SLOT LENGTH. *Wis. Dep. Nat. Resour. Tech. Bull.* No. 173. 39p. 1991. FR 37(2)
[Dep. Nat. Resour., P.O. Box 7921, Madison, WI 53707] *Salmo trutta* in Wisconsin.

92-003514 Perra, Paul. BY-CATCH REDUCTION DEVICES AS A CONSERVATION MEASURE. *Fisheries (Bethesda)* 17(1):28-29. 1992. FR 37(2)

92-003515 Quiggin, John. HOW TO SET CATCH QUOTAS: A NOTE ON THE SUPERIORITY OF CONSTANT EFFORT RULES. *J. Environ. Econ. Manage.* 22(2):199-203. 1992. FR 37(2)
[Dep. Agric. & Resour. Econ., Univ. Md., College Park 20742]

92-003516 Webb, Mark A. and Richard A. Ott, Jr. EFFECTS OF LENGTH AND BAG LIMITS ON POPULATION STRUCTURE AND HARVEST OF WHITE CRAPPIES IN THREE TEXAS RESERVOIRS. *N. Am. J. Fish. Manage.* 11(4):614-622. 1991. FR 37(2)
[Parks & Wildl. Dep., 1004 E. 26th St., Bryan, TX 77803] *Pomoxis annularis.*

FISH CONTROL AND REMOVAL

92-003517 European Inland Fisheries Advisory Commission. REPORT OF THE INTERNATIONAL SEMINAR ON MASS REMOVAL OF (UNWANTED) FISH IN LARGE INLAND WATER BODIES, LAHTI, FINLAND, 10-12 JUNE 1991. *EIFAC (Eur. Inland Fish. Advis. Comm.) Occas. Pap.* No. 26. 24p. 1991. FR 37(2)

92-003518 Hanchet, Stuart and Ben Chisnall. HAKARIMATA RANGE REVISITED - PRELIMINARY RESULTS OF AN EEL REMOVAL EXPERIMENT. *Freshwater Catch* No. 47. p. 14-15. 1991. FR 37(2)
[MAF Fish., Greta Point, Wellington, New Zealand]

92-003519 Holden, Paul B. GHOSTS OF THE GREEN RIVER: IMPACTS OF GREEN RIVER POISONING ON MANAGEMENT OF NATIVE FISHES. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 43-54. 1991. FR 37(2)
[BIO/WEST, Inc., 1063 W. 1400 N., Logan, UT 84321]

92-003520 Naess, Tore; Kjell E. Naas and Ole B. Samuelsen. TOXICITY OF ROTENONE TO SOME POTENTIAL PREDATORS ON MARINE FISH LARVAE - AN EXPERIMENTAL STUDY. *Aquacult. Eng.* 10(3):149-159. 1991. FR 37(2)
[Inst. Mar. Res., Austevoll Aquacult. Res. Stn., N-5392 Storebo, Norway] *Gobiusculus flavescens.*

92-003521 Wynne, M. Bennett and Larry Luckett. EVALUATION OF THE SHULER CREEK RENOVATION PROJECT - PRELIMINARY FINDINGS. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 79-82. 1990. FR 37(2)
[Wildl. Resour. Comm., 512 N. Salisbury St., Raleigh, NC 27611] *Salvelinus fontinalis* and *Salmo trutta* in North Carolina.

MARKING AND TAGGING

92-003522 Alcobendas, Marina; Frederique Lecomte; J. Castanet; F. J. Meunier; P. Maire; M. Holl and G. Panon. [MASSAL LABELLING OF ELVERS WITH FAST BALNEATION IN FLUOROCHROMES. APPLICATION TO TETRACYCLINE LABELLING OF 500 KG OF ELVERS.] *Bull. Fr. Peche Piscic.* 321(2):43-54. 1991. In French with English summ. FR 37(2)
[UA CNRSNÉ1137, Equipe Rech. "Formations squelettiques", Lab. Anat. Comp., Univ. Paris 7, 2 pl. Jussieu, 75251 Paris Cedex 05, France] *Anguilla anguilla.*

92-003523 Armstrong, J. D.; A. D. F. Johnstone and M. C. Lucas. RETENTION OF INTRAGASTRIC TRANSMITTERS AFTER VOLUNTARY INGESTION BY CAPTIVE COD, *GADUS MORHUA* L. *J. Fish Biol.* 40(1):135-137. 1992. FR 37(2)
[SOAFD, Freshwater Fish. Lab., Pitlochry, Perthshire PH16 5LB, Scotland]

92-003524 Kaseloo, P. A.; A. H. Weatherley; J. Lotimer and M. D. Farina. A BIOTELEMETRY SYSTEM FOR RECORDING FISH ACTIVITY. *J. Fish Biol.* 40(2):165-179. 1992. FR 37(2)
[Div. Life Sci., Scarborough Campus, Univ. Toronto, Scarborough, ON, Canada M1C 1A4] *Oncorhynchus mykiss.*

92-003525 Manire, Charles A. and Samuel H. Gruber. EFFECT OF M-TYPE DART TAGS ON FIELD GROWTH OF JUVENILE LEMON SHARKS. *Trans. Am. Fish. Soc.* 120(6):776-780. 1991. FR 37(2)
[Univ. Miami, Rosenstiel School Mar. & Atmos. Sci., Bimini Biol. Field Stn., Div. Mar. Biol. & Fish., 4600 Rickenbacker Causeway, Miami, FL 33149-1098] *Negaprion brevirostris* in Florida.

MARKING AND TAGGING (Continued)

92-003526 Muth, Robert T. and Kevin R. Bestgen. EFFECT OF SUNLIGHT ON TETRACYCLINE MARKS IN OTOLITHS OF COLORADO SQUAWFISH LARVAE. *Trans. Am. Fish. Soc.* 120(5):666-668. 1991. FR 37(2)

[Dep. Fish. & Wildl., Biol. & Larval Fish Lab., Colo. State Univ., Fort Collins 80523] *Ptychocheilus lucius.*

92-003527 Ness, Andreas. COMPUTER AIDED INDIVIDUAL IDENTIFICATION OF BROWN TROUT (*SALMO TRUTTA* F. *FARIO*). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2474-2476. 1989. In English with German summ. FR 37(2)

[Zool. Inst. I, Univ. Heidelberg, Im Neuenheimer Feld 230, D-6900 Heidelberg, Germany]

STOCKING AND INTRODUCTIONS

92-003528 Allendorf, Fred W. ECOLOGICAL AND GENETIC EFFECTS OF FISH INTRODUCTIONS: SYNTHESIS AND RECOMMENDATIONS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):178-181. 1991. In English with French summ. FR 37(2)

[Div. Biol. Sci., Univ. Mont., Missoula, MT 59812]

92-003529 Arthington, Angela H. ECOLOGICAL AND GENETIC IMPACTS OF INTRODUCED AND TRANSLOCATED FRESHWATER FISHES IN AUSTRALIA. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):33-43. 1991. In English with French summ. FR 37(2)

[Cent. Catchment & In-Stream Res., Div. Environ. Sci., Griffith Univ., Nathan, Qld. 4111, Australia]

92-003530 Billington, Neil and Paul D. N. Hebert, editors. INTERNATIONAL SYMPOSIUM ON "THE ECOLOGICAL AND GENETIC IMPLICATIONS OF FISH INTRODUCTIONS (FIN)". *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):181p. 1991. FR 37(2)

[Zool. Dep., Univ. Guelph, Guelph, ON, Canada N1G 2W1] Individual papers indexed in this issue of *Fisheries Review.*

92-003531 Chaine, Eric and F. G. Whoriskey. ECOLOGY OF FERAL RAINBOW TROUT THAT ESCAPED FROM A CAGE CULTURE SITE IN LAC DU PASSAGE, CANADA. *Aquaculture* 100(1-3):169-170. 1992. Abstract only. FR 37(2)

[Macdonald Coll., McGill Univ., 21111 Lakeshore Rd., Ste-Anne-de-Bellevue, PQ, Canada H9X 1C0] *Salvelinus namaycush* and *Oncorhynchus mykiss.*

92-003532 Chelkowski, Zygmunt. SURVIVAL RATE OF SEA TROUT, *SALMO TRUTTA* L. FROM HATCH RELEASE TO SMOLTING IN THE STREAM OSOWKA. *Acta Ichthyol. Piscatoria* 21(1):93-98. 1991. In English with Polish summ. FR 37(2)

[Inst. Akwakult. & Tech. Rybackiej, Akad. Rolnicza, ul. K. Krolewicza 4, 71-550 Szczecin, Poland]

92-003533 Crossman, E. J. INTRODUCED FRESHWATER FISHES: A REVIEW OF THE NORTH AMERICAN PERSPECTIVE WITH EMPHASIS ON CANADA. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):46-57. 1991. In English with French summ. FR 37(2)

[Dep. Ichthyol. & Herpetol., Royal Ontario Mus., Toronto, ON, Canada M5S 2C6]

92-003534 Deutsch, William G.; E. Cliff Webber; David R. Bayne and Clarence W. Reed. EFFECTS OF LARGEMOUTH BASS STOCKING RATE ON FISH POPULATIONS IN AQUATIC MESOCOSMS USED FOR PESTICIDE RESEARCH. *Environ. Toxicol. Chem.* 11(1):5-10. 1992. FR 37(2)

[Dep. Fish. & Allied Aquacult. & Agric. Exp. Stn., Auburn Univ., Auburn, AL 36849] *Lepomis macrochirus* and *Micropterus salmoides* in Alabama.

92-003535 Dochoda, Margaret Ross. MEETING THE CHALLENGE OF EXOTICS IN THE GREAT LAKES: THE ROLE OF AN INTERNATIONAL COMMISSION. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):171-176. 1991. In English with French summ. FR 37(2)

[Great Lakes Fish. Comm., 1451 Green Rd., Ann Arbor, MI 48105]

92-003536 Edmonds, J. S.; R. C. J. Lenanton; N. Caputi and M. Morita. TRACE ELEMENTS IN THE OTOLITHS OF YELLOW-EYE MULLET (*ALDRICHETTA FORSTERI*) AS AN AID TO STOCK IDENTIFICATION. *Fish. Res.* 13(1):39-51. 1992. FR 37(2)

[Western Australian Mar. Res. Lab., P.O. Box 20, North Beach, W.A. 6020, Australia]

92-003537 Evans, David O. and Campbell C. Willox. LOSS OF EXPLOITED, INDIGENOUS POPULATIONS OF LAKE TROUT, *SALVELINUS NAMAYCUSH*, BY STOCKING OF NON-NATIVE STOCKS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):134-147. 1991. In English with French summ. FR 37(2)

[Ontario Minist. Nat. Resour., Res. Sect., Fish. Branch, P.O. Box 5000, Maple, ON, Canada L6A 1S9]

92-003538 Fernando, C. H. IMPACTS OF FISH INTRODUCTIONS IN TROPICAL ASIA AND AMERICA. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):24-32. 1991. In English with French summ. FR 37(2)

[Dep. Biol., Univ. Waterloo, Waterloo, ON, Canada N2L 3G1]

STOCKING AND INTRODUCTIONS (Continued)

92-003539 Gunter, E. Royce, Jr. WARM SPRINGS SALMON AND STEELHEAD HATCHERY, 1989-90. *Calif. Dep. Fish Game Inland Fish. Admin. Rep.* No. 91-14. 10p. 1991. FR 37(2)
Oncorhynchus mykiss, O. tshawytscha, and *O. kisutch* in California.

92-003540 Hanchet, Stuart. KOI CARP - A BEAUTIFUL MENACE? *Freshwater Catch* No. 47. p. 3-4. 1991. FR 37(2)
[MAF Fish., Greta Point, Wellington, New Zealand] *Cyprinus carpio* in New Zealand.

92-003541 Hendrickson, Dean A. and James E. Brooks. TRANSPLANTING SHORT-LIVED FISHES IN NORTH AMERICAN DESERTS: REVIEW, ASSESSMENT, AND RECOMMENDATIONS. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 283-298. 1991. FR 37(2)
[Memorial Mus., Univ. Tex., 2400 Trinity, Austin 78705]

92-003542 Hilborn, Ray. HATCHERIES AND THE FUTURE OF SALMON IN THE NORTHWEST. *Fisheries (Bethesda)* 17(1):5-8. 1992. FR 37(2)
[School Fish. WH-10, Univ. Wash., Seattle 98195] *Oncorhynchus tshawytscha* and *O. kisutch.*

92-003543 Holcik, Juraj. FISH INTRODUCTIONS IN EUROPE WITH PARTICULAR REFERENCE TO ITS CENTRAL AND EASTERN PART. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):13-23. 1991. In English with French summ. FR 37(2)
[Inst. Zool. & Ecosozool., Slovak Acad. Sci., Konvalinkova 3, 842 23 Bratislava, Czechoslovakia]

92-003544 Kapuscinski, Anne R. and Eric M. Hallerman. IMPLICATIONS OF INTRODUCTION OF TRANSGENIC FISH INTO NATURAL ECOSYSTEMS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):99-107. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Wildl., 200 Hodson Hall, Univ. Minn., St. Paul 55108]

92-003545 Kaufman, Les. PROGRESS IN THE CONSERVATION OF ENDEMIC FISHES FROM LAKE VICTORIA. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 403-408. 1991. FR 37(2)
[Edgerton Res. Lab., New England Aquarium, Central Wharf, Boston, MA 02110]

92-003546 Kent, Donald B. and Richard F. Ford. STUDIES EVALUATING THE FEASIBILITY OF STOCKING DEPLETED MARINE FISHERIES IN SOUTHERN CALIFORNIA. *J. World Aquacult. Soc.* 22(3):32A. 1991. Abstract only. FR 37(2)
[Hubbs-Sea World Res. Inst., San Diego, CA] *Paralichthys californicus* and *Atractoscion nobilis.*

92-003547 Krueger, C. C. and B. May. ECOLOGICAL AND GENETIC EFFECTS OF SALMONID INTRODUCTIONS IN NORTH AMERICA. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):66-77. 1991. In English with French summ. FR 37(2)
[Coll. Agric. & Life Sci., Dep. Nat. Resour., Fernow Hall, Cornell Univ., Ithaca, NY 14853] *Salmo trutta.*

92-003548 Leach, J. H. and C. A. Lewis. FISH INTRODUCTIONS IN CANADA: PROVINCIAL VIEWS AND REGULATIONS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):156-161. 1991. In English with French summ. FR 37(2)
[Ontario Minist. Nat. Resour., Lake Erie Fish. Stn., Wheatley, ON, Canada N0P 2P0]

92-003549 Leber, Kenneth M. CAN HATCHERIES ENHANCE MARINE FISH STOCKS?: INITIAL EVIDENCE FROM RELEASE-RECAPTURE EXPERIMENTS IN HAWAII. *J. World Aquacult. Soc.* 22(3):34A-35A. 1991. Abstract only. FR 37(2)
[Oceanic Inst., P.O. Box 25280, Honolulu, HI 96825] *Mugil cephalus.*

92-003550 Lincoln, Richard H. HATCHERY SUPPLEMENTATION OF NATURAL ANADROMOUS SALMONID RUNS IN THE PACIFIC NORTHWEST: OPPORTUNITY AND RISK. *J. World Aquacult. Soc.* 22(3):36A-37A. 1991. Abstract only. FR 37(2)
[Dep. Fish., Olympia, WA 98504] *Oncorhynchus mykiss* in the United States.

92-003551 Marcinko, Martin T.; Richard D. Lorson and Richard A. Snyder. CHANGES IN WILD BROWN TROUT STANDING STOCKS AFTER TERMINATION OF STOCKING. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 83-88. 1990. FR 37(2)
[Fish Comm., 450 Robinson Ln., Bellefonte, PA 16823] *Salmo trutta* in Pennsylvania.

92-003552 McCarty, C. E. and William P. Rutledge. POPULATION ENHANCEMENT OF RED DRUM (*SCIAENOPS OCELLATUS*) WITH A MARINE FISH HATCHERY. *J. World Aquacult. Soc.* 22(3):40A. 1991. Abstract only. FR 37(2)
[Parks & Wildl. Dep., Austin, TX 78744]

92-003553 Ogutu-Ohwayo, Richard and R. E. Hecky. FISH INTRODUCTIONS IN AFRICA AND SOME OF THEIR IMPLICATIONS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):8-12. 1991. In English with French summ. FR 37(2)
[Hecky: Dep. Fish. & Oceans, Freshwater Inst. Sci. Lab., 501 University Crescent, Winnipeg, MB, Canada R3T 2N6] *Lates niloticus, Tilapia nilotica, T. leucosticta, T. melanopleura* and *T. zilli.*

STOCKING AND INTRODUCTIONS (Continued)

92-003554 Philipp, David P. GENETIC IMPLICATIONS OF INTRODUCING FLORIDA LARGEMOUTH BASS, *MICROPTERUS SALMOIDES FLORIDANUS*. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):58-65. 1991. In English with French summ. FR 37(2)
[Cent. Aquat. Ecol., Nat. Hist. Surv., 607 E. Peabody Dr., Champaign, IL 61820] *M. s. salmoides*.

92-003555 Salojarvi, Kalervo. COMPENSATION IN A WHITEFISH (*COREGONUS LAVARETUS* L. *s.l.*) POPULATION MAINTAINED BY STOCKING IN LAKE KALLIOINEN, NORTHERN FINLAND. *Finn. Fish. Res.* Vol. 12. p. 65-76. 1991. FR 37(2)
[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-003556 Spindler, Thomas. [REINTRODUCTION OF WILD CARPS IN RIVER SYSTEMS - DETERMINATION AND ESTABLISHMENT.] *Oesterreichs Fischerei* 44(10):236-237. 1991. In German. FR 37(2)
[Unterolbemdorf 93, A-2123 Kreuttal, Austria] *Cyprinus carpio* and *C. hungaricus* in Austria.

92-003557 Stanley, Jon G.; Robert A. Peoples, Jr. and James A. McCann. U.S. FEDERAL POLICIES, LEGISLATION, AND RESPONSIBILITIES RELATED TO IMPORTATION OF EXOTIC FISHES AND OTHER AQUATIC ORGANISMS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):162-166. 1991. In English with French summ. FR 37(2)
[Natl. Fish. Res. Cent.-Great Lakes, U.S. Fish & Wildl. Serv., 1451 Green Rd., Ann Arbor, MI 48105]

92-003558 Stewart, James E. INTRODUCTIONS AS FACTORS IN DISEASES OF FISH AND AQUATIC INVERTEBRATES. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):110-117. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Oceans, Biol. Sci. Branch, Bedford Inst. Oceanogr., Dartmouth, NS, Canada B2Y 4A2]

92-003559 Toone, William D. and Thomas Hanscom. THE BIOPOLITICS OF REINTRODUCTIONS. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 137-142. 1991. FR 37(2)
[San Diego Wild Anim. Park, San Diego, CA]

92-003560 Venter, A. J. A. and H. J. Schoonbee. THE USE OF TRIPLOID GRASS CARP, *CTENOPHARYNGODON IDELLA* (VAL.), IN THE CONTROL OF SUBMERGED AQUATIC WEEDS IN THE FLORIDA LAKE, ROODEPOORT, TRANSVAAL. *Water S.A. (Pretoria)* 17(4):321-326. 1991. FR 37(2)
[Schoonbee: Res. Unit Aquat. & Terrestrial Ecosyst., Dep. Zool., Rand Afikaans Univ., P.O. Box 524, Johannesburg 2000, South Africa]

92-003561 Welcomme, R. L. INTERNATIONAL INTRODUCTIONS OF FRESHWATER FISH SPECIES INTO EUROPE. *Finn. Fish. Res.* Vol. 12. p. 11-18. 1991. FR 37(2)
[FAO, Via delle Terme di Caracalla, I-00100 Rome, Italy]

92-003562 Willis, Scott A. and Daniel E. Roberts, Jr. ASSESSMENT OF MARINE STOCK ENHANCEMENT IN FLORIDA. *J. World Aquacult. Soc.* 22(3):65A. 1991. Abstract only. FR 37(2)
[Mar. Res. Inst., 100 8th Ave. SE, St. Petersburg, FL 33701] *Sciaenops ocellatus*.

92-003563 Wingate, Paul J. U.S. STATE'S VIEW AND REGULATIONS ON FISH INTRODUCTIONS. *Can. J. Fish. Aquat. Sci.* 48(Suppl. 1):167-170. 1991. In English with French summ. FR 37(2)
[Dep. Nat. Resour., 500 Lafayette Rd., St. Paul, MN 55155-4012]

FISHING GEAR AND TECHNIQUES

92-003564 Azuma, Teruo. DIURNAL VARIATIONS IN SALMON CATCH BY SURFACE GILLNETS IN THE BERING SEA DURING THE SUMMER. *Nippon Suisan Gakkaishi* 57(11):2045-2050. 1991. In English with Japanese summ. FR 37(2)
[Natl. Res. Inst. Far Seas Fish., Shimizu, Shizuoka 424, Japan] *Oncorhynchus keta*, *O. gorbuscha*, and *O. nerka*.

92-003565 Bjorge, Arne and Nils Oien. INCIDENTAL CATCHES AND OCCURRENCE OF HARBOUR PORPOISES IN NORWEGIAN WATERS. *Eur. Res. Cetaceans* No. 4. p. 53. 1990. FR 37(2)
[Norwegian Inst. Nat. Res., Univ. Oslo, P.O. Box 1037, Blindern, 0315 Oslo 3, Norway]

92-003566 Bohling, Paula and Hannu Lehtonen. SIZE, AGE AND SEX COMPOSITION OF PERCH (*PERCA FLUVIATILIS* L.) CATCHES IN DIFFERENT TYPES OF TRAPNETS. *Finn. Fish. Res.* Vol. 12. p. 35-43. 1991. FR 37(2)
[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-003567 Briggs, R. P. AN ASSESSMENT OF NETS WITH A SQUARE MESH PANEL AS A WHITING CONSERVATION TOOL IN THE IRISH SEA *NEPHROPS* FISHERY. *Fish. Res.* 13(2):133-152. 1992. FR 37(2)
[Aquat. Sci. Res. Div., Fish. Res. Lab., Dep. Agric., Coleraine, Northern Ireland] *Merlangius merlangus*.

92-003568 Evans, P. G. H.; A. Aguilar and C. Smeenk, editors. EUROPEAN RESEARCH ON CETACEANS - 4: PROCEEDINGS OF THE FOURTH ANNUAL CONFERENCE OF THE EUROPEAN CETACEAN SOCIETY, PALMA DE MALLORCA, SPAIN, 2-4 MARCH 1990. *Eur. Res. Cetaceans* No. 4. 140p. 1990. FR 37(2)
Selected papers indexed in this issue of *Fisheries Review*.

FISHING GEAR AND TECHNIQUES (Continued)

92-003569 Harada, Katsuhiko. ATTRACTION ACTIVITIES OF HERBAL CRUDE DRUGS FOR ABALONE, ORIENTAL WEATHERFISH, AND YELLOWTAIL. *Nippon Suisan Gakkaishi* 57(11):2083-2088. 1991. In English with Japanese summ. FR 37(2)

[Dep. Food Sci. & Technol., Shimonoseki Univ. Fish., Nagatahonmachi, Shimonoseki, Yamaguchi 759-65, Japan] *Seriola quinqueradiata* and *Misgurnus anguillicaudatus.*

92-003570 Harsanyi, Alexander. [USE OF THE HOLDING NET IN FISHERIES.] *Oesterreichs Fischerei* 45(1):18-29. 1992. In German. FR 37(2)

[Fachberatung Fischerei Bezirks Niederbayern, Maximilianstr. 15, D-8300 Landshut, Germany]

92-003571 Hopkins, Kevin and Amararatne Yakupitiyage. BIAS IN SEINE SAMPLING OF TILAPIA. *J. World Aquacult. Soc.* 22(4):260-262. 1991. FR 37(2)

[Coll. Agric., Univ. Hawaii, Hilo 96720] *Tilapia nilotica.*

92-003572 Jo, Tae Hyun; Byung Moon Lee and Kwangwoo Cho. [STUDIES ON A NOVEL SHEERING DEVICE USING CANVAS FOR TRAWLER: II. FIELD EXPERIMENT.] *Bull. Natl. Fish. Res. Dev. Agency* No. 45. p. 259-268. 1991. In Korean. From Korean Sci. Abstr. 23(6):2323. 1991. FR 37(2)

92-003573 Losanes, Loel P.; Ko Matuda; Tadanobu Machii and Atsushi Koike. CATCHING EFFICIENCY AND SELECTIVITY OF ENTANGLING NETS. *Fish. Res.* 13(1):9-23. 1992. FR 37(2)

[Lab. Fish. Sci. & Technol., Tokyo Univ. Fish., 4-5-7 Konan, Minato-ku, Tokyo 108, Japan] *Konosirus punctatus* in Japan.

92-003574 Monzon, Florencia; Javier Corcuera; Alex Aguilar and J. Antonio Raga. SMALL CETACEANS INTERACTING WITH COASTAL FISHERIES IN THE AREA OF NECOCHEA (ARGENTINA). *Eur. Res. Cetaceans* No. 4. p. 123-124. 1990. FR 37(2)

[Dep. Biol. (Vertebr.), FCEyN, Univ. Buenos Aires, 1428 Buenos Aires, Argentina] *Engraulis anchoita* and *Scomber japonicus.*

92-003575 Muoneke, M. I. HOOKING MORTALITY OF WHITE CRAPPIE, *POMOXIS ANNULARIS* RAFINESQUE, AND SPOTTED BASS, *MICROPTERUS PUNCTULATUS* (RAFINESQUE), IN TEXAS RESERVOIRS. *Aquacult. Fish. Manage.* 23(1):87-93. 1992. FR 37(2)

[Muoneke, Parks & Wildl. Dep., Heart Hills Res. Stn., Hwy. Contract Rt. 7, Box 62, Ingram, TX 78025]

92-003576 New Zealand Ministry of Foreign Affairs. FINAL ACT OF THE MEETING ON A CONVENTION TO PROHIBIT DRIFTNET FISHING IN THE SOUTH PACIFIC AND CONVENTION FOR THE PROHIBITION OF FISHING WITH LONG DRIFTNETS IN THE SOUTH PACIFIC. *Ocean Yearb.* No. 9. p. 452-460. 1991. FR 37(2)

92-003577 Reis, E. G. and M. G. Pawson. DETERMINATION OF GILL-NET SELECTIVITY FOR BASS (*DICENTRARCHUS LABRAX* L.) USING COMMERCIAL CATCH DATA. *Fish. Res.* 13(2):173-187. 1992. FR 37(2)

[Fundacao Univ. Rio Grande, Dep. Oceanogr., Ave. Italia Km 8, CP 474, 96200 Rio Grande, Brazil]

92-003578 Rey, Juan Carlos and Ramon Munoz-Chapuli. RELATION BETWEEN HOOK DEPTH AND FISHING EFFICIENCY IN SURFACE LONGLINE GEAR. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):729-732. 1991. FR 37(2)

[Spanish Inst. Oceanogr., Coastal Cent. Fuengirola, P.O. Box 285, Fuengirola, Malaga, Spain] *Xiphias gladius* and *Isurus oxyrinchus* in Spain.

92-003579 Rulifson, Roger A.; James D. Murray and James J. Bahen. FINFISH CATCH REDUCTION IN SOUTH ATLANTIC SHRIMP TRAWLS USING THREE DESIGNS OF BY-CATCH REDUCTION DEVICES. *Fisheries (Bethesda)* 17(1):9-20. 1992. FR 37(2)

[Inst. Coastal & Mar. Resour., E. Carolina Univ., Greenville, NC 27858]

92-003580 Sneed, Paul G. CONTROLLING THE "CURTAINS OF DEATH": PRESENT AND POTENTIAL OCEAN MANAGEMENT METHODS FOR REGULATING THE PACIFIC DRIFTNET FISHERIES. *Ocean Yearb.* No. 9. p. 213-230. 1991. FR 37(2)

[Dep. Geogr., Univ. Hawaii, Honolulu]

92-003581 Soivio, Antti; Leena Forsman; Ari Kauttu; Jaana Kauttu and Marja Muona. TRAWLING STRESS OF BROWN TROUT. *Finn. Fish. Res.* Vol. 12. p. 135-142. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., P.O. Box 202, SF-00151 Helsinki, Finland] *Salmo trutta lacustris* in Finland.

92-003582 Suuronen, Petri; Russell B. Millar and Ahto Jarvik. SELECTIVITY OF DIAMOND AND HEXAGONAL MESH CODENDS IN PELAGIC HERRING TRAWLS: EVIDENCE OF A CATCH SIZE EFFECT. *Finn. Fish. Res.* Vol. 12. p. 143-156. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland] *Clupea harengus.*

FISHING GEAR AND TECHNIQUES (Continued)

92-003583 Tetreault, Fred. A HISTORY OF HOOKS. *Farm Pond Harvest* 26(1):7, 25-27. 1992. FR 37(2)

FISHWAYS, FISH PASSAGE THROUGH DAMS, ETC.

92-003584 Laine, Anne. THE EFFECTS OF A FISHWAY MODEL HYDRAULICS ON THE ASCENT OF VENDACE, WHITEFISH AND BROWN TROUT IN INARI, NORHERN FINLAND. *Aqua Fenn.* 20(2):191-198. 1990. In English with Finnish summ. FR 37(2)

[Dep. Zool., Univ. Oulu, SF-90570 Oulu, Finland] *Coregonus albula, C. lavaretus, C. pidschian, C. wartmanni,* and *Salmo trutta.*

92-003585 Larinier, M. and Sylvie Boyer-Bernard. [DOWNSTREAM MIGRATION OF SMOLTS AND EFFECTIVENESS OF A FISH BYPASS STRUCTURE AT HALSOU HYDROELECTRIC POWERHOUSE ON THE NIVE RIVER.] *Bull. Fr. Peche Piscic.* 321(2):72-92. 1991. In French with English summ. FR 37(2)

[Cell. Passes Poissons CSP-CEMAGREF, BP 26, 31321 Castanet-Tolosan Cedex, France] *Salmo salar* in France.

92-003586 Mitchell, Charles. FISH PASS DESIGNS WHICH MAY HAVE POTENTIAL FOR NEW ZEALAND NATIVE FRESHWATER FISH. *Freshwater Catch* No. 47. p. 15-18. 1991. FR 37(2)

[MAF Fish., Rotorua, New Zealand]

MATHEMATICS, STATISTICAL METHODS, AND MODELING

92-003587 Abrams, Peter A. STRENGTHS OF INDIRECT EFFECTS GENERATED BY OPTIMAL FORAGING. *Oikos* 62(2):167-176. 1991. FR 37(2)

[Dep. Ecol., Evol. & Behav., Univ. Minn., 318 Church St. S.E., Minneapolis 55455]

92-003588 Arnason, A. Neil; Sandra A. Bannatyne; Michael H. Papst and Glen E. Hopky. A GROWTH MODEL FITTING PROCEDURE THAT SIMULTANEOUSLY PROVIDES AN ACCURATE FEEDING TABLE. *Aquaculture* 100(1-3):168. 1992. Abstract only. FR 37(2)

[Univ. Manitoba, Winnipeg, & Freshwater Inst., Winnipeg, MB, Canada] *Oncorhynchus mykiss.*

92-003589 Arreguin-Sanchez, F.; E. A. Chavez and J. A. Menchaca. A MULTISPECIES STOCK ASSESSMENT OF A PELAGIC COASTAL FISHERY OF THE SOUTH-WEST GULF OF MEXICO. *Aquacult. Fish. Manage.* 23(1):103-112. 1992. FR 37(2)

[Cent. Invest. & Estudios Avanzados del IPN, Km 6 Carreterra Antigua Progreso AP 73-Cordemex 97310, Merida, Yucatan, Mexico] *Scomberomorus maculatus, S. cavalla,* and *Caranx fusus.*

92-003590 Buijse, Anthonie D.; Jos S. Pet; Wim L. T. van Densen; Marcel A. M. Machiels and Rudy Rabbinge. A SIZE- AND AGE-STRUCTURED SIMULATION MODEL FOR EVALUATION OF MANAGEMENT STRATEGIES IN A MULTISPECIES GILL NET FISHERY. *Fish. Res.* 13(2):95-117. 1992. FR 37(2)

[Dep. Fish Culture & Fish., Agric. Univ. Wageningen, P.O. Box 338, 6700 AH Wageningen, Netherlands] *Perca fluviatilis* and *Stizostedion lucioperca.*

92-003591 Camargo, Julio A. NEW DIVERSITY INDEX FOR ASSESSING STRUCTURAL ALTERATIONS IN AQUATIC COMMUNITIES. *Bull. Environ. Contam. Toxicol.* 48(3):428-434. 1992. FR 37(2)

[Dep. Biol., Colo. State Univ., Fort Collins 80523]

92-003592 Cerrato, Robert M. ANALYSIS OF NONLINEARITY EFFECTS IN EXPECTED-VALUE PARAMETERIZATIONS OF THE VON BERTALANFFY EQUATION. *Can. J. Fish. Aquat. Sci.* 48(11):2109-2117. 1991. In English with French summ. FR 37(2)

[Mar. Sci. Res. Cent., SUNY, Stony Brook, NY 11794-5000]

92-003593 DiNardo, Gerard Thomas. FISHMAP: AN EXPERT SYSTEM FOR SAMPLING FISH POPULATIONS. *Ph.D. dissertation, Univ. Md. (College Park)* 219p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(6):2845-2846. 1991. Oder No. DA9133054. FR 37(2)

Morone americana and *M. saxatilis* in Maryland.

92-003594 Hampton, John. ESTIMATION OF SOUTHERN BLUEFIN TUNA *THUNNUS MACCOYII* GROWTH PARAMETERS FROM TAGGING DATA, USING VON BERTALANFFY MODELS INCORPORATING INDIVIDUAL VARIATION. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):577-590. 1991. FR 37(2)

[S. Pac. Comm., B.P. D5, Noumea Cedex, New Caledonia]

92-003595 Hampton, John. ESTIMATION OF SOUTHERN BLUEFIN TUNA *THUNNUS MACCOYII* NATURAL MORTALITY AND MOVEMENT RATES FROM TAGGING EXPERIMENTS. *U.S. Natl. Mar. Fish. Serv. Fish. Bull.* 89(4):591-610. 1991. FR 37(2)

[S. Pac. Comm., B.P. D5, Noumea Cedex, New Caledonia]

92-003596 Hoogenboezem, Wim; Eddy H. R. R. Lammens; Yvette van Vugt and Jan W. M. Osse. A MODEL FOR SWITCHING BETWEEN PARTICULATE-FEEDING AND FILTER-FEEDING IN THE COMMON BREAM, *ABRAMIS BRAMA. Environ. Biol. Fishes* 33(1-2):13-21. 1992. FR 37(2)

[Limnol. Inst., De Akkers 47, 8536 VD Oosterzee, Netherlands]

MATHEMATICS, STATISTICAL METHODS, AND MODELING (Continued)

92-003597 Jensen, A. L. MULTIPLE SPECIES FISHERIES WITH NO ECOLOGICAL INTERACTION: TWO-SPECIES SCHAEFER MODEL APPLIED TO LAKE TROUT AND LAKE WHITEFISH. *J. Cons. Cons. Int. Explor. Mer* 48(2):167-171. 1991. FR 37(2)

[School Nat. Resour., Univ. Mich., Ann Arbor 48109-1115] *Salvelinus namaycush* and *Coregonus clupeaformis.*

92-003598 Jensen, John W. A MODEL FOR THE MAXIMUM GROWTH OF BROWN TROUT (*SALMO TRUTTA* L.). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2393-2399. 1989. FR 37(2)

[Univ. Trondheim, Mus. Nat. Hist. & Archaeol., Erling Skakkesgt. 47 A, N-7004 Trondheim, Norway]

92-003599 Jin, Kang-Ren and Donald C. Raney. NUMERICAL COMPUTATIONS OF A TWO-LAYER MODEL FOR ESTUARIES. *Northeast Gulf Sci.* 12(1):1-15. 1991. FR 37(2)

[Dep. Civil Eng., Miss. State Univ., Mississippi State 39762]

92-003600 Jumper, George Y., Jr., and Ronald C. Baird. LOCATION BY OLFACTION: A MODEL AND APPLICATION TO THE MATING PROBLEM IN THE DEEP-SEA HATCHETFISH *ARGYROPELECUS HEMIGYMNUS. Am. Nat.* 138(6):1431-1458. 1991. FR 37(2)

[Dep. Mechanical Eng., Worcester Polytechnic Inst., Worcester, MA 01609]

92-003601 Kennedy, John O. S. and Hanoch Pasternak. OPTIMAL AUSTRALIAN AND JAPANESE HARVESTING OF SOUTHERN BLUEFIN TUNA. *Nat. Resour. Modeling* 5(2):213-238. 1991. FR 37(2)

[Dep. Econ., La Trobe Univ., Bundoora 3083, Australia] *Thunnus thynnus.*

92-003602 Knyazev, I. V. DIFFERENT APPROACHES TO THE DETERMINATION OF PARAMETERS IN THE SIGMOIDAL GROWTH EQUATION USING THE OB PELED, *COREGONUS PELED*, AS AN EXAMPLE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):37-44. 1991. FR 37(2)

[Siberian Res. & Proj. Design Inst. Fish. Res., Tyumen, USSR]

92-003603 Lapointe, Michael F. and Randall M. Peterman. SPURIOUS CORRELATIONS BETWEEN FISH RECRUITMENT AND ENVIRONMENTAL FACTORS DUE TO ERRORS IN THE NATURAL MORTALITY RATE USED IN VIRTUAL POPULATION ANALYSIS (VPA). *J. Cons. Cons. Int. Explor. Mer* 48(2):219-228. 1991. FR 37(2)

[School Resour. & Environ. Manage., Simon Fraser Univ., Burnaby, BC, Canada V5A 1S6]

92-003604 Lutnesky, Marvin. TEST OF A TEMPORAL-THRESHOLD MODEL OF POLYGYNOUS MATING IN TWO TIME SCALES. *Pac. Sci.* 46(1):98. 1992. Abstract only. FR 37(2)

[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822] *Centropyge potteri.*

92-003605 Malmgren-Hansen, A.; J. W. Baretta and P. Ruardij. A MODULAR APPROACH FOR MODELLING OF THE NORTH SEA ECOSYSTEM. *Water Sci. Technol.* 24(10):1-8. 1991. FR 37(2)

[Water Quality Inst., 11 Agern Alle, DK-2970 Horsholm, Denmark]

92-003606 Marttunen, M. and M. Virtanen. A SYSTEM MODEL FOR EFFECTS OF LAKE REGULATION ON FISH STOCKS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2401-2405. 1989. FR 37(2)

[Natl. Board Waters & Environ., Water Resour. Off., PB 250, SF-00101 Helsinki, Finland]

92-003607 Millar, R. B. SELECTING LOCI FOR GENETIC STOCK IDENTIFICATION USING MAXIMUM LIKELIHOOD, AND THE CONNECTION WITH CURVATURE METHODS. *Can. J. Fish. Aquat. Sci.* 48(11):2173-2179. 1991. In English with French summ. FR 37(2)

[Dep. Fish. & Oceans, Sci. Branch, P.O. Box 5667, St. John's, NF, Canada A1C 5X1]

92-003608 Moreau, Jacques and Sena S. De Silva. PREDICTIVE FISH YIELD MODELS FOR LAKES AND RESERVOIRS OF THE PHILIPPINES, SRI LANKA AND THAILAND. *FAO Fish Tech. Pap.* No. 319. 42p. 1991. Available at $12.00 from UNIPUB, 4611-F Assembly Dr., Lanham, MD 20706-4391. FR 37(2)

[Dep. Inland Fish., Fac. Agron., 145 Ave. Muret, 31076 Toulouse Cedex, France]

92-003609 Neumann, Robert M. and Brian R. Murphy. EVALUATION OF THE RELATIVE WEIGHT (W_r) INDEX FOR ASSESSMENT OF WHITE CRAPPIE AND BLACK CRAPPIE POPULATIONS. *N. Am. J. Fish. Manage.* 11(4):543-555. 1991. FR 37(2)

[Dep. Wildl. & Fish. Sci., S.D. State Univ., Brookings 57007] *Pomoxis nigromaculatus* and *P. annularis* in the United States.

92-003610 Nichols, James D. CAPTURE-RECAPTURE MODELS. *BioScience* 42(2):94-102. 1992. FR 37(2)

[Branch Migratory Bird Res., Patuxent Wildl. Res. Cent., U.S. Fish & Wildl. Serv., Laurel, MD 20708]

92-003611 Ottera, H. BIAS IN CALCULATING GROWTH RATES IN COD (*GADUS MORHUA* L.) DUE TO SIZE SELECTIVE GROWTH AND MORTALITY. *J. Fish Biol.* 40(3):465-467. 1992. FR 37(2)

[Inst. Mar. Res., Dep. Aquacult., P.O. Box 1870, N-5024 Bergen, Norway]

MATHEMATICS, STATISTICAL METHODS, AND MODELING (Continued)

92-003612 Papst, M. H.; A. N. Arnason and G. H. Hopky. A MODEL FOR PREDICTING VARIABILITY IN FISH GROWTH WITHIN RAINBOW TROUT POPULATIONS. *Aquaculture* 100(1-3):102. 1992. Abstract only. FR 37(2)

[Dep. Fish. & Oceans, Freshwater Inst., Winnipeg, MB, Canada] *Oncorhynchus mykiss.*

92-003613 Pelletier, Dominique and Philippe Gros. ASSESSING THE IMPACT OF SAMPLING ERROR ON MODEL-BASED MANAGEMENT ADVICE: COMPARISON OF EQUILIBRIUM YIELD PER RECRUIT VARIANCE ESTIMATORS. *Can. J. Fish. Aquat. Sci.* 48(11):2129-2139. 1991. In English with French summ. FR 37(2)

[IFREMER, BP 1049, 44037 Nantes Cedex 01, France]

92-003614 Punsly, Richard and Hideki Nakano. ANALYSIS OF VARIANCE AND STANDARDIZATION OF LONGLINE HOOK RATES OF BIGEYE (*THUNNUS OBESUS*) AND YELLOWFIN (*THUNNUS ALBACARES*) TUNAS IN THE EASTERN PACIFIC OCEAN DURING 1975-1987. *Inter-Am. Trop. Tuna Comm. Bull.* 20(4):167-184. 1992. In English and Spanish. FR 37(2)

[Inter-Am. Trop. Tuna Comm., Scripps Inst. Oceanogr., La Jolla, CA]

92-003615 Santha, Calista Rohini; W. E. Grant; William H. Neil and R. Kirk Strawn. BIOLOGICAL CONTROL OF AQUATIC VEGETATION USING GRASS CARP: SIMULATION OF ALTERNATIVE STRATEGIES. *Ecol. Modell.* 59(3/4):229-245. 1991. FR 37(2)

[Dep. Wildl. & Fish. Sci., Tex. A&M Univ., College Station 77843] *Ctenopharyngodon idella* in Texas.

92-003616 Scheffer, Marten. FISH AND NUTRIENTS INTERPLAY DETERMINES ALGAL BIOMASS: A MINIMAL MODEL. *Oikos* 62(3):271-282. 1991. FR 37(2)

[Inst. Inland Water Manage. & Waste Water Treatment, P.O. Box 17, NL-8200 AA Lelystad, Netherlands]

92-003617 Searcy-Bernal, Richardo. STATISTICAL POWER IN AQUACULTURAL RESEARCH. *J. World Aquacult. Soc.* 22(3):54A. 1991. Abstract only. FR 37(2)

[Div. Environ. Studies, Univ. Calif., Davis 95616-8576]

92-003618 Stergiou, K. I. SHORT-TERM FISHERIES FORECASTING: COMPARISON OF SMOOTHING, ARIMA AND REGRESSION TECHNIQUES. *J. Appl. Ichthyol.* 7(4):193-204. 1991. In English with German and French summ. FR 37(2)

[Natl. Cent. Mar. Res., Agios Kosmas, Hellinikon, Athens 16604, Greece] *Trachurus.*

92-003619 Thorburn, Margaret A. THE RANDOMNESS OF SAMPLES COLLECTED BY DIP-NET METHODS FROM RAINBOW TROUT IN TANKS. *Aquaculture* 101(3/4):385-390. 1992. FR 37(2)

[Dep. Popul. Med., Ontario Vet. Coll., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Oncorhynchus mykiss.*

92-003620 Trebitz, Anett S. TIMING OF SPAWNING IN LARGEMOUTH BASS: IMPLICATIONS OF AN INDIVIDUAL-BASED MODEL. *Ecol. Modell.* 59(3/4):203-227. 1991. FR 37(2)

[Cent. Limnol., 680 N. Park St., Univ. Wis., Madison 53706] *Micropterus salmoides.*

92-003621 Tseytlin, V. B. ESTIMATING THE DAILY RATIONS OF FISHES IN NATURE. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):73-79. 1991. FR 37(2)

[Inst. Oceanol., Acad. Sci. USSR (IOAN), Moscow, USSR]

92-003622 Tyler, Jeffrey Alan. HABITAT SELECTION AND FORAGING BEHAVIOR IN STREAM FISH: IDEAL FREE MODELS AND EXPERIMENTS WITH BLACKNOSE DACE, *RHINICHTHYS ATRATULUS. Ph.D. dissertation, State Univ. N.Y. (Albany)* 129p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4002-4003. 1992. Order No. DA9203197. FR 37(2)

92-003623 Wetzel, Richard L. and Charles S. Hopkinson, Jr. COASTAL ECOSYSTEM MODELS AND THE CHESAPEAKE BAY PROGRAM: PHILOSOPHY, BACKGROUND, AND STATUS. *Chesapeake Bay Program* TRS41/90. p. 7-23. 1990. FR 37(2)

[Coll. William & Mary, School Mar. Sci., Inst. Mar. Sci., Gloucester Point, VA 23062]

LAKE MANAGEMENT AND RESEARCH

92-003624 Abbey, D. H. and W. C. Mackay. PREDICTING THE GROWTH OF AGE-0 YELLOW PERCH POPULATIONS FROM MEASURES OF WHOLE-LAKE PRODUCTIVITY. *Freshwater Biol.* 26(3):519-525. 1991. FR 37(2)

[Box 422, College Heights, AB, Canada T0C 0Z0] *Perca flavescens* in Canada.

92-003625 Beckett, David C.; Thomas P. Aartila and Andrew C. Miller. CONTRASTS IN DENSITY OF BENTHIC INVERTEBRATES BETWEEN MACROPHYTE BEDS AND OPEN LITTORAL PATCHES IN EAU GALLE LAKE, WISCONSIN. *Am. Midl. Nat.* 127(1):77-90. 1992. FR 37(2)

[Dep. Biol. Sci., Box 5018, Univ. South. Miss., Hattiesburg 39406]

LAKE MANAGEMENT AND RESEARCH (Continued)

92-003626 Boersma, M.; W. L. T. van Densen and J. Vijverberg. THE EFFECT OF PREDATION BY SMELT *(OSMERUS EPERLANUS)* ON *DAPHNIA HYALINA* IN A SHALLOW EUTROPHIC LAKE. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2438-2442. 1989. FR 37(2)
[Limnol. Inst., Tjeukemeer Lab., De Akkers 47, NL-8536 VD Oosterzee, Netherlands]

92-003627 Fontaine, Thomas D. and Donald J. Stewart. EXPLORING THE EFFECTS OF MULTIPLE MANAGEMENT OBJECTIVES AND EXOTIC SPECIES ON GREAT LAKES FOOD WEBS AND CONTAMINANT DYNAMICS. *Environ. Manage.* 16(2):225-229. 1992. FR 37(2)
[Water Quality Div., S. Fla. Water Manage. Dist., 3301 Gun Club Rd., West Palm Beach 33416]

92-003628 Foster, G. N. AQUATIC BEETLE POPULATION CHANGES ASSOCIATED WITH RECREATING A TROUT FISHERY BY LIMING A LAKE CATCHMENT. *Arch. Hydrobiol.* 122(3):313-322. 1991. FR 37(2)
[Scottish Agric. Coll., Environ. Sci. Dep., Auchincruive, Ayr KA6 5HW, Scotland] *Salmo trutta* in Scotland.

92-003629 Ghan, David and W. Gary Sprules. DISTRIBUTION AND ABUNDANCE OF LARVAL AND JUVENILE BURBOT *(LOTA LOTA)* IN ONEIDA LAKE, NEW YORK. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2377-2381. 1989. FR 37(2)
[Dep. Zool., Univ. Toronto, Erindale Coll., Mississauga, ON, Canada L5L 1C6]

92-003630 Gophen, M.; P. D. Walline and B. Azoulay. ASSOCIATIONS BETWEEN LARVAL SARDINES AND *PERIDINIUM* PATCHES IN LAKE KINNERET (ISRAEL). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2537-2540. 1989. FR 37(2)
[Kinneret Limnol. Lab., P.O. Box 345, Israel Oceanogr. & Limnol. Res. Co., Tiberias, Israel] *Mirogrex terraesanctae terraesanctae.*

92-003631 Guy, Christopher S. and David W. Willis. SEASONAL VARIATION IN CATCH RATE AND BODY CONDITION FOR FOUR FISH SPECIES IN A SOUTH DAKOTA NATURAL LAKE. *J. Freshwater Ecol.* 6(3):281-292. 1991. FR 37(2)
[Dep. Wildl. & Fish. Sci., S.D. State Univ., Brookings 57007] *Esox lucius, Pomoxis nigromaculatus, Perca flavescens* and *Stizostedion vitreum.*

92-003632 Hartvich, Petr. [COLONIZATION BY FISHES AND EXTENT OF ANGLING IN FLOODED GRAVEL PITS IN THE WITTINGAU PRESERVE.] *Oesterreichs Fischerei*44(10):243-248. 1991. In German. FR 37(2)
[Agron. Fak., Abt. Nat. & Fischerei, Sinkuleho 13, 370 05 Ceske Budejovice, Czechoslovakia]

92-003633 Hooe, Michael L. CRAPPIE BIOLOGY AND MANAGEMENT (SYMPOSIUM HELD AUGUST 29, 1990, IN PITTSBURGH, PENNSYLVANIA). *N. Am. J. Fish. Manage.* 11(4):483-484. 1991. FR 37(2)
[Nat. Hist. Surv., Sam Parr Biol. Stn., R.R. 1, Box 174, Kinmundy, IL 62854] *Pomoxis nigromaculatus* and *P. annularis* in the United States. Individual papers indexed in this issue of *Fisheries Review.*

92-003634 Kallio-Nyberg, Irma and Marja-Liisa Koljonen. THE FINNISH CHAR (*SALVELINUS ALPINUS*) STOCK REGISTER. *Finn. Fish. Res.* Vol. 12. p. 77-82. 1991. FR 37(2)
[Finnish Game & Fish. Res. Inst., Fish. Div., P.O. Box 202, SF-00151 Helsinki, Finland]

92-003635 Kerr, Steven J. and Gerry C. LeTendre. THE STATE OF THE LAKE ONTARIO FISH COMMUNITY IN 1989. *Gt. Lakes Fish. Comm. Spec. Publ.* 91(3):38p. 1991. FR 37(2)
[Ontario Minist. Nat. Resour., Provincial Gov. Bldg., Concession Rd., Kemptville, ON, Canada K0G 1J0]

92-003636 Kiyashko, S. I.; A. M. Mamontov and M. Zh. Chernyaev. FOOD WEB ANALYSIS OF LAKE BAIKAL FISH BY RATIOS OF STABLE CARBON ISOTOPES. *Dokl. Biol. Sci. (Engl. Transl. Dokl. Akad. Nauk SSSR)* 318(1-6):274-276. 1991. FR 37(2)
[Inst. Aquat. Biol., Far East Branch, Acad. Sci. USSR, Vladivostock, USSR] Data for 24 species in the USSR.

92-003637 Kling, George W.; Brian Fry and W. John O'Brien. STABLE ISOTOPES AND PLANKTONIC TROPHIC STRUCTURE IN ARCTIC LAKES. *Ecology* 73(2):561-566. 1992. FR 37(2)
[Dep. Biol., Univ. Mich., Ann Arbor 48109-1048]

92-003638 Koksvik, J. I. and H. Reinertsen. EFFECTS OF FISH ELIMINATION ON THE PLANKTON COMMUNITY OF A LAKE USED IN FISH FARMING. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2387-2392. 1989. FR 37(2)
[Univ. Trondhiem, Mus. Nat. Hist. & Archaeol., Dep. Zool., N-7004 Trondheim, Norway]

92-003639 Moreau, Jacques; Joseph Munyandorero and Boniface Nyakageni. [EVALUATION OF DEMOGRAPHIC PARAMETERS OF *STOLOTHRISSA TANGANYKAE* AND *LIMNOTHRISSA MIODON* OF LAKE TANGANYKA.] *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2552-2558. 1989. In French. FR 37(2)
[Lab. Ichthyol. Appl., Ecol. Natl. Superieure Agron., 145 Ave. Muret, F-31076 Toulouse Cedex, France]

92-003640 Paulovits, Gabor and Peter Biro. HYDROACOUSTIC STUDIES ON FISH STOCK DISTRIBUTION IN LAKE BALATON. *Int. Ver. Theor. Angew. Limnol. Verh.*24(4):2517-2518. 1989. FR 37(2)
[Balaton Limnol. Res. Inst. Hungarian Acad. Sci., H-8237 Tihany, Hungary]

LAKE MANAGEMENT AND RESEARCH (Continued)

92-003641 Peltonen, H. and J. Horppila. THE EFFECTS OF MASS REMOVAL ON THE ROACH *RUTILUS RUTILUS* (L.) STOCK OF LAKE VESIJARVI ESTIMATED WITH VPA WITHIN ONE SEASON. *J. Fish Biol.* 40(2):293-301. 1992. FR 37(2)

[Univ. Helsinki, Dep. Limnol., Viikki, SF-00710 Helsinki, Finland]

92-003642 Perenyi, Miklos and Peter Biro. YIELD AND RECRUIT ESTIMATES OF RAZOR FISH (*PELECUS CULTRATUS* L.) IN LAKE BALATON. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2509-2512. 1989. FR 37(2)

[Balaton Limnol. Res. Inst. Hungarian Acad. Sci., H-8237 Tihany, Hungary]

92-003643 Pyrovetsi, Myrto and George Daoutopoulos. EDUCATIONAL RESPONSE TO DIFFERENCES IN ENVIRONMENTAL ATTITUDES AMONG LAKE FISHERMEN. *Landscape Urban Plann.* 20(1-3):167-172. 1991. FR 37(2)

[Dep. Biol., Aristotelian Univ., Box 119, Thessaloniki 540 06, Greece]

92-003644 Ranta, Esa; Kai Lindstrom and Martti Rask. FISH CATCH AND WATER QUALITY IN SMALL LAKES. *Fish. Res.* 13(1):1-7. 1992. FR 37(2)

[Integrative Ecol. Unit, Dep. Zool., Univ. Helsinki, P. Rautatiekatu 13, SF-00100 Helsinki, Finland]

92-003645 Rask, Martti. ISO VALKJARVI RESEARCH: AN INTRODUCTION TO A MULTIDISCIPLINARY LAKE LIMING STUDY. *Finn. Fish. Res.* Vol. 12. p. 25-34. 1991. FR 37(2)

[Finnish Game & Fish. Res. Inst., Evo State Fish. & Aquacult. Res. Stn., SF-16970 Evo, Finland] *Perca fluviatilis* and *Esox lucius* in Finland.

92-003646 Ravera, O. and J. L. Jamet. THE DIET OF THE RUDD (*SCARDINIUS ERYTHROPHTHALMUS*, L.) IN RELATION TO THE POSSIBLE CONSEQUENCES FOR THE REMOVAL OF THIS SPECIES FROM AN EUTROPHIC LAKE. *Arch. Hydrobiol.* 123(1):99-109. 1991. FR 37(2)

[Environ. Inst., Comm. European Communities, Joint Res. Cent., Ispra Site, 21020 Ispra (Va), Italy]

92-003647 Tatrai, Istvan; Judit Padisak and Simonian Aschot. IMPACT OF JUVENILE CYPRINID FISH PREDATION ON THE FOOD AVAILABILITY AND ZOOPLANKTON COMMUNITY. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2519-2522. 1989. FR 37(2)

[Limnol. Res. Inst. Hungarian Acad. Sci., H-8237 Tihany, Hungary] *Abramis brama* in Hungary.

92-003648 Wu, Lin. TROPHIC INTERACTIONS IN A LARGE-LAKE ECOSYSTEM: ONTOGENY OF FISH DIET, ZOOPLANKTON SUMMER DYNAMICS, AND PHYTOPLANKTON SUCCESSION. *Ph.D. dissertation, Ohio State Univ.* 136p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4073-4074. 1992. Order No. DA9201782. FR 37(2)

Perca flavescens.

RIVER AND STREAM MANAGEMENT AND RESEARCH

92-003649 Adamicka, Peter. [FATE OF THE AVERAGE *COTTUS GOBIO* L. IN THE LUNZER SEEBACH.] *Oesterreichs Fischerei* 44(7):162-164. 1991. In German. FR 37(2)

[Biol. Stn. Lunz, 3293 Lunz See, Germany]

92-003650 Amores-Serrano, Raul Ramon. STREAM-DWELLING MEIOFAUNA: TEMPORAL ABUNDANCE, DISTRIBUTION AND UTILIZATION BY LARVAL FISH. *Ph.D. dissertation, Univ. Arkansas* 173p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4070. 1992. Order No. DA9204675. FR 37(2)

92-003651 Banister, C.; D. Groome and G. Pawson. THE SHARED USE DEBATE: A DISCUSSION ON THE JOINT USE OF CANAL TOWING PATHS BY WALKERS, ANGLERS AND CYCLISTS. *J. Environ. Manage.* 34(2):149-158. 1992. FR 37(2)

[Dep. Planning & Landscape, Univ. Manchester, Oxford Rd., Manchester M13 9PL, England]

92-003652 Bergander, Fred E. SOUTHEAST ALASKA SOCKEYE SALMON STUDIES, 1987-89: COMPLETION REPORT FOR THE PERIOD 1 JULY 1987 TO 30 JUNE 1989. *Alsk. Dep. Fish. Game. Tech. Fish. Rep.* No. 91-18. 40p. 1991. FR 37(2)

[Dep. Fish & Game, Div. Commer. Fish., P.O. Box 25526, Juneau, AK 99802- 5526] *Oncorhynchus nerka.*

92-003653 Borawa, James C. BROWN TROUT WORKSHOP: BIOLOGY AND MANAGEMENT. *Trout. Comm. South. Div. Am. Fish. Soc.* 140p. 1990. FR 37(2)

[Brown Trout Workshop, Rt. 1, Box 1638, Clarkesville, GA 30523] *Salmo trutta.*

92-003654 Bozek, Michael A. and Frank J. Rahel. ASSESSING HABITAT REQUIREMENTS OF YOUNG COLORADO RIVER CUTTHROAT TROUT BY USE OF MACROHABITAT AND MICROHABITAT ANALYSES. *Trans. Am. Fish. Soc.* 120(5):571-581. 1991. FR 37(2)

[Ontario Minist. Nat. Resour., Cent. North. For. Ecosyst. Res., Lakehead Univ., 955 Oliver Rd., Thunder Bay, ON, Canada P7B 5E1] *Oncorhynchus clarki pleuriticus* in Wyoming.

RIVER AND STREAM MANAGEMENT AND RESEARCH (Continued)

92-003655 Bramblett, Robert G. and Kurt D. Fausch. VARIABLE FISH COMMUNITIES AND THE INDEX OF BIOTIC INTEGRITY IN A WESTERN GREAT PLAINS RIVER. *Trans. Am. Fish. Soc.* 120(6):752-769. 1991. FR 37(2)
[Fausch: Dep. Fish. & Wildl. Biol., Colo. State Univ., Fort Collins 80523] *Cyprinella lutrensis* in Colorado.

92-003656 Copp, G. H.; J. M. Oliver; M. Penaz and A. L. Roux. JUVENILE FISHES AS FUNCTIONAL DESCRIBERS OF FLUVIAL ECOSYSTEM DYNAMICS: APPLICATIONS ON THE RIVER RHONE, FRANCE. *Regul. Rivers Res. Manage.* 6(2):135-145. 1991. FR 37(2)
[School Nat. Sci., Hatfield Polytech., College Ln., Hatfield, Hertshire AL10 9AB, England] Data for 13 speices.

92-003657 Copp, Gordon H. TYPOLOGY OF AQUATIC HABITATS IN THE GREAT OUSE, A SMALL REGULATED LOWLAND RIVER. *Regul. Rivers Res. Manage.* 6(2):125-134. 1991. FR 37(2)
[Hatfield Polytechnic, School Nat. Sci., College Ln., Hatfield, Hertshire AL10 9AB, England]

92-003658 Heggenes, Jan; Age Brabrand and Svein Jakob Saltveit. DETERMINATION OF MICROHABITAT PREFERENCE AND UTILIZATION IN JUVENILE BROWN TROUT *(SALMO TRUTTA)* AND ATLANTIC SALMON *(S. SALAR)* IN A RIVER USING TWO DIFFERENT SAMPLING METHODS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2400. 1989. Abstract only. FR 37(2)
[Dep. Biol. & Nat. Conserv., Agric. Univ. Norway, Box 14, N-1432 As-NLH, Norway]

92-003659 Hesslein, R. H.; M. J. Capel; D. E. Fox and K. A. Hallard. STABLE ISOTOPES OF SULFUR, CARBON, AND NITROGEN AS INDICATORS OF TROPHIC LEVEL AND FISH MIGRATION IN THE LOWER MACKENZIE RIVER BASIN, CANADA. *Can. J. Fish. Aquat. Sci.* 48(11):2258-2265. 1991. In English with French summ. FR 37(2)
[Dep. Fish. & Oceans, Cent. & Arctic Reg., Freshwater Inst., 501 University Crescent, Winnipeg, MB, Canada R3T 2N6] *Coregonus clupeaformis* and *C. nasus.*

92-003660 Hunt, Robert L. HABITAT DEVELOPMENT TECHNIQUES USED TO IMPROVE BROWN TROUT FISHERIES IN WISCONSIN. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 12-20. 1990. FR 37(2)
[Dep. Nat. Resour., 11084 Stratton Lake Rd., Waupaca, WI 54981] *Salvelinus fontinalis* and *Salmo trutta.*

92-003661 Javalgi, Ashok G.; Yung-Tse Hung and Ruth Yu-Li Yeh. WATER QUALITY OF NORTH CAROLINA STREAMS. *Ohio J. Sci.* 92(2):51. 1992. Abstract only. FR 37(2)
[Civil Eng. Dep., Cleveland State Univ., Cleveland, OH 44115]

92-003662 Jennings, Michael D. and John P. Reganold. A THEORETICAL BASIS FOR MANAGING ENVIRONMENTALLY SENSITIVE AREAS. *Environ. Conserv.* 18(3):211-218. 1991. FR 37(2)
[Div. Park & Resour. Planning, Natl. Park Serv., 200 Chestnut St., Rm. 260, Philadelphia, PA 19067]

92-003663 Koljonen, Marja-Liisa and Irma Kallio-Nyberg. THE FINNISH TROUT (*SALMO TRUTTA*) STOCK REGISTER. *Finn. Fish. Res.* Vol. 12. p. 83-90. 1991. FR 37(2)
[Finnish Game & Fish. Res. Inst., Aquacult. Div., P.O. Box 202, SF-00151 Helsinki, Finland] *S. t. lacustris, S. t. trutta,* and *S. t. fario.*

92-003664 Kozel, Steven J.; Wayne A. Hubert and Milton G. Parsons. RELATIONS OF HABITAT FEATURES TO BROWN TROUT ABUNDANCE IN UNIMPACTED DRAINAGES ON THE MEDICINE BOW NATIONAL FOREST, WYOMING. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 38-44. 1990. FR 37(2)
[U.S. For. Serv., Bighorn Natl. For., Sheridan, WY 82801] *Salmo trutta.*

92-003665 Lelek, A. THE PREDATOR-PREY RELATIONSHIP IN THE FISH COMMUNITY OF THE RHINE RIVER. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2455-2460. 1989. FR 37(2)
[Res. Inst. Senckenberg, Senckenberganlage 25, D-6000 Frankfurt/M. 1, Germany]

92-003666 MacCrimmon, Hugh R.; Barra L. Gots and Macrae N. Morse. STREAM HABITAT EFFECTS ON REPRODUCTIVE SUCCESS AND JUVENILE PRODUCTION OF BROWN TROUT. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 54-64. 1990. FR 37(2)
[Dep. Zool., Univ. Guelph, Guelph, ON, Canada N1G 2W1] *Salmo trutta* in Canada.

92-003667 Meador, Michael R. and William J. Matthews. SPATIAL AND TEMPORAL PATTERNS IN FISH ASSEMBLAGE STRUCTURE OF AN INTERMITTENT TEXAS STREAM. *Am. Midl. Nat.* 127(1):106-114. 1992. FR 37(2)
[U.S. Geol. Surv., 3916 Sunset Ridge Rd., Raleigh, NC 27607]

92-003668 Meadows, R. OBSERVATIONS ON STRIPED BASS IN THE SHUBENACADIE RIVER SYSTEM, 1950-1990. *Can. Tech. Rep. Fish. Aquat. Sci.* No. 1832. p. 57-60. 1991. FR 37(2)
[Stewiacke, NS, Canada B0N 2J0] *Morone saxatilis* in Canada.

92-003669 Myers, Thomas J. and Sherman Swanson. AQUATIC HABITAT CONDITION INDEX, STREAM TYPE, AND LIVESTOCK BANK DAMAGE IN NORTHERN NEVADA. *Water Resour. Bull.* 27(4):667-677. 1991. FR 37(2)
[Dep. Range, Wildl. & For., Univ. Nev., 1000 Valley Rd., Reno 89512]

RIVER AND STREAM MANAGEMENT AND RESEARCH (Continued)

92-003670 Oberdorff, T. and R. M. Hughes. MODIFICATION OF AN INDEX OF BIOTIC INTEGRITY BASED ON FISH ASSEMBLAGES TO CHARACTERIZE RIVERS OF THE SEINE BASIN, FRANCE. *Hydrobiologia* 228(2):117-130. 1992. FR 37(2)

[Sepia Int., Dep. Environ., 14 Av. G. Eiffel, F-78182 Saint Quentin Yvelines Cedex, France]

92-003671 Pusey, B. J. and A. H. Arthington. THE UTILITY AND APPLICABILITY OF THE IN-STREAM FLOW INCREMENTAL METHODOLOGY (IFIM) FOR AUSTRALIAN LOTIC ENVIRONMENTS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2559. 1989. Abstract only. FR 37(2)

[Cent. Catchment & Instream Res., Griffith Univ., Brisbane, Qld., Australia]

92-003672 Raibley, Paul T. and Larry A. Jahn. CHARACTERISTICS OF COMMERCIALLY HARVESTED CHANNEL CATFISH FROM AREAS OF THE MISSISSIPPI RIVER ALONG ILLINOIS: COMMERCIAL HARVEST AND THE 15.0 - IN MINIMUM LENGTH LIMIT. *J. Freshwater Ecol.* 6(4):363-376. 1991. FR 37(2)

[Long Term Resour. Monitoring Program - Havana Field Stn., Nat. Hist. Surv., Havana, IL 62644] *Ictalurus punctatus.*

92-003673 Rinne, John N. and Paul R. Turner. RECLAMATION AND ALTERATION AS MANAGEMENT TECHNIQUES, AND A REVIEW OF METHODOLOGY IN STREAM RENOVATION. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 219-244. 1991. FR 37(2)

[U.S. For. Serv., Rocky Mt. For. & Range Exp. Stn., For. Res. Lab., Tempe, AZ 85287]

92-003674 Sabo, Matthew J. and William E. Kelso. RELATIONSHIP BETWEEN MORPHOMETRY OF EXCAVATED FLOODPLAIN PONDS ALONG THE MISSISSIPPI RIVER AND THEIR USE AS FISH NURSERIES. *Trans. Am. Fish. Soc.* 120(5):552-561. 1991. FR 37(2)

[Dep. Fish. & Wildl. Sci., VPI&SU, Cheatham Hall, Blacksburg, VA 24061] *Lepomis, Morone, Pomoxis nigromaculatus, Ictalurus punctatus, Pimephales vigilax, Ictalurus melas, Notropis maculatus, Etheostoma proeliare, Percina caprodes,* and *Dorosoma* in Louisiana.

92-003675 Sabo, Matthew J.; William E. Kelso; C. Frederick Bryan and D. Allen Rutherford. PHYSICOCHEMICAL FACTORS AFFECTING LARVAL FISH DENSITIES IN MISSISSIPPI RIVER FLOODPLAIN PONDS, LOUISIANA (U.S.A.). *Regul. Rivers Res. Manage.* 6(2):109-116. 1991. FR 37(2)

[Dep. Fish. & Wildl. Sci., VPI&SU, Blacksburg, VA 24061-0321]

92-003676 Schiemer, F.; T. Spindler; H. Wintersberger; A. Schneider and A. Chovanec. FISH FRY ASSOCIATIONS: IMPORTANT INDICATORS FOR THE ECOLOGICAL STATUS OF LARGE RIVERS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2497-2500. 1989. FR 37(2)

[Dep. Limnol., Inst. Zool., Univ. Vienna, Althanstr. 14, A-1090 Vienna, Austria] *Chondrostoma nasus, Barbus barbus, Gobio albipinnatus, Vimba vimba, Leuciscus idus,* and *Rutilus pigus virgo* in Austria.

92-003677 Shields, F. Douglas, Jr. and Jan Jeffrey Hoover. EFFECTS OF CHANNEL RESTABILIZATION ON HABITAT DIVERSITY, TWENTYMILE CREEK, MISSISSIPPI. *Regul. Rivers Res. Manage.* 6(3):163-181. 1991. FR 37(2)

[U.S. Dep. Agric., Agricult. Res. Serv., Natl. Sedimentation Lab., P.O. Box 1157, Oxford, MS 38655-1157] *Hybopsis aestivalis, Notemigonus crysoleucas, Notropis texanus, Gambusia affinis, Menidia beryllina,* and *Ammocrypta meridiana.*

92-003678 Strange, Elizabeth M.; Theodore C. Foin and Peter B. Moyle. EVALUATING THE ROLE OF ENVIRONMENTAL VARIABILITY IN COMMUNITY ASSEMBLY: INTERACTIONS BETWEEN STOCHASTIC AND DETERMINISTIC PROCESSES IN STREAM FISH ASSEMBLAGES. *Rev. Suisse Zool.* 98(4):714. 1991. Abstract only. FR 37(2)

92-003679 Strange, Elizabeth M.; Theodore C. Foin and Peter B. Moyle. A SIMULATION MODEL FOR ASSESSING MANAGEMENT AND ENVIRONMENTAL IMPACTS ON STREAM FISHES. *Rev. Suisse Zool.* 98(4):705-706. 1991. Abstract only. FR 37(2)

92-003680 Thorn, William C. EFFECTS OF HABITAT IMPROVEMENT AND A SPECIAL REGULATION ON A BROWN TROUT POPULATION. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 45-53. 1990. FR 37(2)

[Dep. Nat. Res., P. O. Box 69, Lake City, MN 55041] *Salmo trutta* in Minnesota.

92-003681 Trush, William Joseph. THE INFLUENCE OF CHANNEL MORPHOLOGY AND HYDROLOGY ON SPAWNING POPULATIONS OF STEELHEAD TROUT IN SOUTH FORK EEL RIVER TRIBUTARIES. *Ph.D. dissertation, Univ. Calif. (Berkeley)* 209p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):3974-3975. 1992. Order No. DA9203747. FR 37(2)

Oncorhynchus mykiss in California.

RIVER AND STREAM MANAGEMENT AND RESEARCH (Continued)

92-003682 Vadas, Robert L., Jr. SEASONAL HABITAT USE, SPECIES ASSOCIATIONS, AND ASSEMBLAGE STRUCTURE OF FORAGE FISHES IN GOOSE CREEK, NORTHERN VIRGINIA. I. MACROHABITAT PATTERNS. *J. Freshwater Ecol.* 6(4):403-417. 1991. FR 37(2)

[Dep. Fish. & Wildl. Sci., VPI&SU, Blacksburg, VA 24061-0321] *Cyprinella spiloptera, Luxilis cornutus, Notropis procne, N. hudsonius, N. rubellus, Ericymba buccata, Pimephales notatus, Etheostoma blennioides,* and *Lepomis auritus.*

92-003683 Vranovsky, M. ZOOPLANKTON OF A DANUBE SIDE ARM UNDER REGULATED ICHTHYOCOENOSIS CONDITIONS. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2505-2508. 1989. FR 37(2)

[Inst. Fish. Res. & Hydrobiol., Frienova 3, CS-826 24 Bratislava, Czechoslovakia] *Ctenopharyngodon idella* in Czechoslovakia.

92-003684 Ward, David L. and Anthony A. Nigro. DIFFERENCES IN FISH ASSEMBLAGES AMONG HABITATS FOUND IN THE LOWER WILLAMETTE RIVER, OREGON: APPLICATION OF AND PROBLEMS WITH MULTIVARIATE ANALYSIS. *Fish. Res.* 13(2):119-132. 1992. FR 37(2)

[Dep. Fish & Wildl., Res. & Dev. Sect., 17330 S.E. Evelyn St., Clackamas, OR 97015] *Ptychocheilus oregonensis, Pomoxis nigromaculatus, P. annularis, Micropterus salmoides, M. dolomieu,* and *Stizostedion vitreum vitreum.*

92-003685 Young, W. J. FLUME STUDY OF THE HYDRAULIC EFFECTS OF LARGE WOODY DEBRIS IN LOWLAND RIVERS. *Regul. Rivers Res. Manage.* 6(3):203-211. 1991. FR 37(2)

[Cent. Environ. Appl. Hydrol., Univ. Melbourne, Melbourne, Vic., Australia]

92-003686 Zalewski, M.; W. Puchalski; P. Frankiewicz and M. Nowak. THE RELATION BETWEEN PRIMARY PRODUCTION AND FISH BIOMASS DISTRIBUTION IN AN UPLAND RIVER SYSTEM. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2493-2496. 1989. FR 37(2)

[Univ. Lodz, Banacha 16, PL-90237 Lodz, Poland] *Phoxinus phoxinus* and *Noemacheilus barbatulus* in Poland.

FARM POND AND SMALL IMPOUNDMENT MANAGEMENT AND RESEARCH

92-003687 Grimm, Marten Pieter. WATER QUANTITY MANAGEMENT IN DUTCH POLDERS, ADVERSELY AFFECTING THE RECRUITMENT OF NORTHERN PIKE (*ESOX LUCIUS* L.). *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2443-2445. 1989. FR 37(2)

[Witteveen + Bos, Consult. Eng., P.O. Box 233, 7400 AE Deventer, Netherlands]

92-003688 Holopainen, I. J.; W. M. Tonn and C. A. Paszkowski. ECOLOGICAL RESPONSES OF CRUCIAN CARP POPULATIONS TO PREDATION BY PERCH IN A MANIPULATED POND. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2412-2417. 1989. FR 37(2)

[Dep. Biol., Univ. Joensuu, P.O. Box 111, SF-80101 Joensuu 10, Finland] *Carassius carassius, Perca fluviatilis,* and *Esox lucius.*

92-003689 Hooe, Michael L. and D. Homer Buck. EVALUATION OF F_1 HYBRID CRAPPIES AS SPORT FISH IN SMALL IMPOUNDMENTS. *N. Am. J. Fish. Manage.* 11(4):564-571. 1991. FR 37(2)

[Nat. Hist. Surv., Sam Parr Biol. Stn., R.R. 1, Box 174, Kinmundy, IL 62854] *Pomoxis nigromaculatus* x *P. annularis* in Illinois.

92-003690 Howick, Gregory L.; Jeffrey M. Giddings; Frank de Noyelles; Leonard C. Ferrington, Jr.; W. Dean Kettle and Debra Baker. RAPID ESTABLISHMENT OF TEST CONDITIONS AND TROPHIC-LEVEL INTERACTIONS IN 0.04-HECTARE EARTHEN POND MESOCOSMS. *Environ. Toxicol. Chem.* 11(1):107-114. 1992. FR 37(2)

[Springborn Lab., Inc., Box 142D, R.R. 3, Lawrence, KS 66044] *Lepomis macrochirus* in Kansas.

92-003691 van der Ploeg, Martine and Claude E. Boyd. GEOSMIN PRODUCTION BY CYANOBACTERIA (BLUE-GREEN ALGAE) IN FISH PONDS AT AUBURN, ALABAMA. *J. World Aquacult. Soc.* 22(4):207-216. 1991. FR 37(2)

[Agric. & For. Exp. Stn., Delta Res. & Ext. Cent., Stoneville, MS 38776] *Micropterus salmoides* and *Lepomis.*

LARGE IMPOUNDMENT MANAGEMENT AND RESEARCH

92-003692 Bacalbasa-Dobrovici, Nicolae. FISH POPULATION EVOLUTION (1985-1988) IN THE LAST DANUBE BUILT RESERVOIR IRON GATES II. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2524-2527. 1989. FR 37(2)

[Galatz Univ., Str. Domneasea 47, RO-6200 Galatz 6, Romania]

92-003693 Butler, Larry T. and Garth W. Redfield. THE RESTON (VIRGINIA) LAKE-USE SURVEY: PUBLIC PERCEPTIONS AND MANAGEMENT IMPLICATIONS. *Water Resour. Bull.* 27(4):603-610. 1991. FR 37(2)

[Open Space Resour., Open Space Dep., Reston Assoc., 1930 Isaac Newton Sq., Reston, VA 22090]

LARGE IMPOUNDMENT MANAGEMENT AND RESEARCH (Continued)

92-003694 Ciepielewski, Wladyslaw. LONG-TERM CHANGES IN FISH CATCHES, BIOMASS AND PRODUCTION OF SOME EXPLOITED FISH SPECIES IN HEATED LAKES NEAR KONIN. *Ekol. Pol.* 38(2):123-161. 1990. In English with Polish summ. FR 37(2)

[Dep. Ichtiol., Inst. Inland Fish., 10-957 Olsztyn, Oczapowskiego 10, Poland] *Rutilus rutilus* and *Abramis brama* in Poland.

92-003695 Gilkes, P. W.; J. P. Millmore and J. E. Bell. THE ROADFORD SCHEME: PLANNING, RESERVOIR CONSTRUCTION AND THE ENVIRONMENT. *J. Inst. Water Environ. Manage.* 5(6):659-670. 1991. FR 37(2)

92-003696 Granado-Lorencio, Carlos. FISH COMMUNITIES OF SPANISH RESERVOIR SYSTEMS: A NON-DETERMINISTIC APPROACH. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2428-2431. 1989. FR 37(2)

[Dep. Biol. Vegetal & Ecol., Fac. Biol., Univ. Sevilla, Apdo. 1095, E-41080 Seville, Spain] *Chondrostoma polylepis, Cyprinus carpio, C. kollari, Barbus barbus bocagei,* and *Micropterus salmoides.*

92-003697 Lawson, J. D.; H. T. Sambrook; D. J. Solomon and G. Weilding. THE ROADFORD SCHEME: MINIMIZING ENVIRONMENTAL IMPACT ON AFFECTED CATCHMENTS. *J. Inst. Water Environ. Manage.* 5(6):671-681. 1991. FR 37(2)

Salmo salar and *S. trutta* in England.

92-003698 Libosvarsky, Jiri. MONITORING OF FISHES IN MUSOV RESERVOIR (CZECHOSLOVAKIA). *Folia Zool.* 40(1):67-74. 1991. FR 37(2)

[Inst. Syst. & Ecol. Biol., Czechoslovak Acad. Sci., Kvetna 8, 603 65 Brno, Czechoslovakia] Data for 16 species.

92-003699 Miron, I. THE EFFECT OF THE REEF OF THE FIRST FLOATING SALMONID FARM ON THE BICAZ RESERVOIR. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2528-2530. 1989. FR 37(2)

[Statiunea Salmonicola POTOCI, RO-5650 Bicaz, Romania] *Oncorhynchus mykiss* and data for 13 other species in Romania.

92-003700 Oster, Jeanette M.; David T. Taylor; James J. Jacobs and Edward B. Bradley. RESERVOIR EUTROPHICATION AND RECREATIONAL ACTIVITY ON FLAMING GORGE RESERVOIR. *Univ. Wyo. Exp. Stn. Bull.* No. 908. 22p. 1989. FR 37(2)

92-003701 Sah, Jaysingh; Dean F. Schreiner and Mark Schorr. REGIONAL ECONOMIC IMPACT OF LAKE TEXOMA STRIPED BASS AND NON-STRIPED BASS FISHING ACTIVITIES. *Okla. Agric. Exp. Stn. Res. Proj.* No. 923. 25p. 1991. FR 37(2)

[Dep. Agric. Econ., Okla. State Univ., Stillwater] *Morone saxatilis.*

92-003702 Tabor, Roger A. and Wayne A. Wurtsbaugh. PREDATION RISK AND THE IMPORTANCE OF COVER FOR JUVENILE RAINBOW TROUT IN LENTIC SYSTEMS. *Trans. Am. Fish. Soc.* 120(6):728-738. 1991. FR 37(2)

[U.S. Fish & Wildl. Serv., West. Wash. Fish. Resour. Off., 2625 Parkmont Ln., Bldg. A, Olympia, WA 98502] *Oncorhynchus mykiss* and *Salmo trutta* in Utah.

ESTUARY MANAGEMENT AND RESEARCH

92-003703 Boltachev, A. R. SPECIES COMPOSITION IN THE ESTUARINE ICHTHYOCENE OF THE MANGROVE ZONE OF GUINEA. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):67-75. 1991. FR 37(2)

[Inst. Biol. South. Seas, Ukrainian Acad. Sci., Sevastopol, USSR]

92-003704 Haire, Michael and Elizabeth C. Krome. PERSPECTIVES ON THE CHESAPEAKE BAY, 1990. ADVANCES IN ESTUARINE SCIENCES. *Chesapeake Bay Program* TRS41/90. 98p. 1990. FR 37(2)

[Chesapeake Res. Consortium, P.O. Box 1120, Gloucester Point, VA 23062] Selected papers indexed in this issue of *Fisheries Review.*

92-003705 Nelson, David M.; Mark E. Monaco; Elizabeth A. Irlandi; Lawrence R. Settle and Linda Coston-Clements. DISTRIBUTION AND ABUNDANCE OF FISHES AND INVERTEBRATES IN SOUTHEAST ESTUARIES. *NOAA (Natl. Oceanic Atmos. Admin.) ELMR (Estuarine Living Mar. Resour.) Rep.* No. 9. 177p. 1991. FR 37(2)

[Strategic Environ. Assessment Div., Off. Ocean Resour. Conserv. & Assessment, Natl. Ocean Serv., Rockville, MD 20852]

92-003706 Robin, Jean-Paul. THE BROWN SHRIMP FISHERY OF THE LOIRE ESTUARY: PRODUCTION AND BY-CATCH OF JUVENILE FISH. *Fish. Res.* 13(2):153-172. 1992. FR 37(2)

[Lab. Biol. Mar., Univ. Nantes, 2 rue de la Houssiniere, 44072 Nantes Cedex 03, France] *Merlangius merlangus, Trisopterus luscus, Solea solea,* and *Platichthys flesus* in France.

92-003707 Rooker, J. R. and G. D. Dennis. DIEL, LUNAR AND SEASONAL CHANGES IN A MANGROVE FISH ASSEMBLAGE OFF SOUTHWESTERN PUERTO RICO. *Bull. Mar. Sci.* 49(3):684-698. 1991. FR 37(2)

[5040 Nicollet Ave., Minneapolis, MN 55419] *Haemulon flavolineatum* and *H. sciurus.*

ESTUARY MANAGEMENT AND RESEARCH (Continued)

92-003708 Scheffel, Hans-Joachim and Michael Schirmer. LARVAE AND JUVENILES OF FRESHWATER AND EURYHALINE FISHES IN THE TIDAL RIVER WESER AT BREMEN, FRG. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2446-2450. 1989. FR 37(2)
[Univ. Bremen, FB 2 (Biol.), Postfach 330 440, D-2800 Bremen 33, Germany] Data for 20 species.

92-003709 Smith, Gordon C. OCCURRENCE AND DIETS OF JUVENILE *CARANX IGNOBILIS* AND *CARANX MELAMPYGUS* (TELEOSTEI: CARANGIDAE) IN THE HANALEI RIVER ESTUARY, NORTH KAUAI, HAWAII. *Pac. Sci.* 46(1):103. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822]

92-003710 Szedimayer, Stephen T. DISTRIBUTION AND ABUNDANCE OF NEARSHORE FISHES IN THE ANCLOTE RIVER ESTUARY, WEST-CENTRAL FLORIDA. *Northeast Gulf Sci.* 12(1):75-82. 1991. FR 37(2)
[Auburn Univ., Mar. Ext. & Res. Cent., 4170 Commanders Dr., Mobile, AL 36615]

92-003711 Tyler, William A. III. TROPHIC LINK BETWEEN STREAM DISCHARGE AND SPAWNING PATTERNS IN A CORAL-REEF FISH. *Pac. Sci.* 46(1):103-104. 1992. Abstract only. FR 37(2)
[Dep. Zool., Univ. Hawaii Manoa, Honolulu 96822] *Abudefduf abdominalis* in Hawaii.

92-003712 Vieira, Joao Paes. ECOLOGY OF ESTUARINE FISH ASSEMBLAGES IN PATOS LOGOON, BRAZIL (32ÉS), AND YORK RIVER, USA (37ÉN), WITH REVIEW OF ZOOGEOGRAPHY OF FISHES IN WESTERN ATLANTIC WARMTEMPERATE AND TROPICAL ESTUARIES. *Ph.D. dissertation, Coll. William Mary* 228p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4570. 1992. Order No. DA9207763. FR 37(2)

MARINE MANAGEMENT AND RESEARCH

92-003713 Balykina, N. V.; A. V. Vinnikov and V. V. Maksimenkov. ICHTHYOPLANKTON ON THE EASTERN PART OF THE SEA OF OKHOTSK IN MAY-JUNE 1987. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):31-35. 1991. FR 37(2)
[Kamchatka Sect., Pac. Ocean Sci. Res. Inst. Fish. & Oceanogr. (KoTINRO), Petropavlovsk-Kamchatskiy, USSR]

92-003714 Bardach, John E. SUSTAINABLE DEVELOPMENT OF FISHERIES. *Ocean Yearb.* No. 9. p. 57-72. 1991. FR 37(2)
[Environ. & Policy Inst., East-West Cent., Univ. Hawaii, Honolulu]

92-003715 Bay-Hansen, C. D. FISHERIES OF THE PACIFIC NORTHWEST COAST. TRADITIONAL COMMERCIAL FISHERIES. *Vantage Press Inc.* Vol. 1. 221p. 1991. Available at $17.95 (cloth) from Vantage Press, Inc., 516 W. 34 St., New York, NY 10001. FR 37(2)

92-003716 Bayliff, William H., editor. THE QUARTERLY REPORT: JULY-SEPTEMBER 1991 OF THE INTER-AMERICAN TROPICAL TUNA COMMISSION. *Inter-Am. Trop. Tuna Comm. Bull.* No. 3. 57p. 1991. In English and Spanish. FR 37(2)
[Scripps Inst. Oceanogr., 8604 La Jolla Shores Dr., La Jolla, CA 92037]

92-003717 Borgese, Elisabeth Mann. *PERESTROIKA* AND THE LAW OF THE SEA. *Ocean Yearb.* No. 9. p. 1-27. 1991. FR 37(2)

92-003718 Burykin, Yu. B. and E. A. Kublik. ICHTHYOPLANKTON IN KANDALAKSHSKYI BAY IN THE WHITE SEA: COMPOSITION, NUMBERS, SEASONAL CHANGES. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(5):143-153. 1991. FR 37(2)
[Dep. Biol., Univ. Moscow, Moscow, USSR]

92-003719 Daan, N. and others. ECOLOGY OF NORTH SEA FISH. *Neth. J. Sea Res.* 26(2-4):343-386. 1990. From Deep-Sea Res. Part B Oceanogr. Lit. Rev. 38(12):6427. 1991. FR 37(2)
[Netherlands Inst. Fish. Invest., P.O. Box 68, 1970 AB IJmuiden, Netherlands]

92-003720 Ditton, Robert B.; Duane A. Gill and Carol L. MacGregor. UNDERSTANDING THE MARKET FOR CHARTER AND HEADBOAT FISHING SERVICES. *Mar. Fish. Rev.* 53(1):19-26. 1991. FR 37(2)
[Dep. Wildl. & Fish Sci., Tex. A&M Univ., College Station 77843]

92-003721 Drolet, R.; L. Fortier; D. Ponton and M. Gilbert. PRODUCTION OF FISH LARVAE AND THEIR PREY IN SUBARCTIC SOUTHEASTERN HUDSON BAY. *Mar. Ecol. Prog. Ser.* 77(2-3):105-118. 1991. FR 37(2)
[Dep. Biol., Univ. Laval, Ste-Foy, PQ, Canada G1K 7P4] *Ammodytes* and *Boreogadus saida* in Canada.

92-003722 Ehrhardt, Nelson M. POTENTIAL IMPACT OF A SEASONAL MIGRATORY JUMBO SQUID (*DOSIDICUS GIGAS*) STOCK ON A GULF OF CALIFORNIA SARDINE (*SARDINOPS SAGAX CAERULEA*) POPULATION. *Bull. Mar. Sci.* 49(1-2):325-332. 1991. FR 37(2)
[Rosenstiel School Mar. & Atmos. Sci., Div. Mar. Biol. & Fish., Univ. Miami, 4600 Rickenbacker Causeway, Miami, FL 33149-1098]

MARINE MANAGEMENT AND RESEARCH (Continued)

92-003723 Fishery Committee for the Eastern Central Atlantic. REPORT OF THE NINTH SESSION OF THE WORKING PARTY ON RESOURCE EVALUATION: LAGOS, NIGERIA, 19-23 NOVEMBER 1990. *FAO Fish. Rep.* No. 454. 80p. 1991. In English and French. Available at $12.00 (paper) from UNIPUB, 4611-F Assembly Dr., Lanham, MD 20706-4391. FR 37(2)

92-003724 Freestone, David. PROTECTION OF MARINE SPECIES AND ECOSYSTEMS IN THE WIDER CARIBBEAN: THE PROTOCOL OF SPECIALLY PROTECTED AREAS AND WILDLIFE. *Mar. Pollut. Bull.* 22(12):579-581. 1991. FR 37(2)
[Law School, Univ. Hull, Hull HU6 7RX, England]

92-003725 Friedheim, Robert L. FISHING NEGOTIATIONS AT THE THIRD UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA. *Ocean Dev. Int. Law* 22(3):209-257. 1991. FR 37(2)
[School Int. Relations & Sea Grant Inst. Program, Univ. South. Calif., Los Angeles 90007]

92-003726 Hayashi, Moritaka. FISHERIES IN THE NORTH PACIFIC: JAPAN AT A TURNING POINT. *Ocean Dev. Int. Law* 22(4)343-364. 1991. FR 37(2)
[Off. Ocean Affairs & Law Sea, United Nations, New York, NY 10017]

92-003727 Hook, John H. SEASONAL VARIATION IN RELATIVE ABUNDANCE AND SPECIES DIVERSITY OF FISHES IN SOUTH BAY. *Contrib. Mar. Sci.* No. 32. p. 127-141. 1991. FR 37(2)
[Dep. Biol., Univ. Southwest. La., Lafayette 70504]

92-003728 Isaev, N. A. and A. S. Seliverstov. POPULATION STRUCTURE OF THE HEBRIDEAN-NORWEGIAN SCHOOL OF BLUE WHITING, *MICROMESISTIUS POUTASSOU. J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):45-58. 1991. FR 37(2)
[All-Union Res. Inst., Mar. Fish. & Oceanogr. (UNIRO), Moscow, USSR]

92-003729 Jowett, Ian. HYDROLOGY, THE STREAM ENVIRONMENT, AND BIOTA. *Freshwater Catch* No. 46. p. 20-21. 1991. FR 37(2)

92-003730 Leewis, R. J. and H. W. Waardenburg. ENVIRONMENTAL IMPACT OF SHIPWRECKS IN THE NORTH SEA. I. POSITIVE EFFECTS: EPIFAUNA OF NORTH SEA SHIPWRECKS. *Water Sci. Technol.* 24(10):297-298. 1991. FR 37(2)
[Tidal Waters Div., P.O. Box 20907, 2500 EX The Hague, Netherlands]

92-003731 Lincoln Smith, M. P.; J. D. Bell and C. A. Hair. SPATIAL VARIATION IN ABUNDANCE OF RECENTLY SETTLED ROCKY REEF FISH IN SOUTHEASTERN AUSTRALIA: IMPLICATIONS FOR DETECTING CHANGE. *Mar. Ecol. Prog. Ser.* 77(1):95-103. 1991. FR 37(2)
[Ecol. Lab. Pty., Ltd., 6/28-34 Roseberry St., Balgowlah, N.S.W. 2093, Australia] Data for 11 species.

92-003732 Lindeman, K. C. OVERWASH MANGROVES AND ASSOCIATED HABITATS OF COASTAL CHANNELS: SETTLEMENT AND JUVENILE HABITAT USAGE IN HAEMULIDS, LUTJANIDS, AND OTHER REEF FISHES OF THE WESTERN ATLANTIC. *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 62. 1988. English and Spanish poster only. FR 37(2)
[Div. Biol. & Living Resour., Rosensteal School Mar. & Atmos. Sci., Univ. Miami, FL]

92-003733 Maharaj, Vishwanie and Conrad Recksiek. THE BY-CATCH FROM THE ARTISANAL SHRIMP TRAWL FISHERY, GULF OF PARIA, TRINIDAD. *Mar. Fish. Rev.* 53(2):9-15. 1991. FR 37(2)
[Dep. Fish. Anim. & Vet. Sci., Univ. R.I., Kingston 02881]

92-003734 Mason, Janet E. VARIATIONS IN THE CATCH OF JACK MACKEREL IN THE SOUTHERN CALIFORNIA PURSE SEINE FISHERY. *Calif. Coop. Oceanic Fish. Invest. Rep.* Vol. 32. p. 143-151. 1991. In English with Spanish summ. FR 37(2)
[Pac. Fish. Environ. Group, Southwest Fish. Sci. Cent., NMFS, P.O. Box 831, Monterey, CA 93942] *Trachurus symmetricus.*

92-003735 McDorman, Ted L. CANADA AND THE NORTH PACIFIC OCEAN: RECENT ISSUES. *Ocean Dev. Int. Law* 22(4):365-379. 1991. FR 37(2)
[Fac. Law, Univ. Victoria, Victoria, BC, Canada]

92-003736 Miles, Edward L. and David L. Fluharty. U.S. INTERESTS IN THE NORTH PACIFIC. *Ocean Dev. Int. Law* 22(4):315-342. 1991. FR 37(2)
[School Mar. Affairs, HF-05, Coll. Oceans & Fish. Sci., Univ. Wash., Seattle 98195]

92-003737 Miyake, Hiroya. [MULTIVARIATE ANALYSIS ON FLUCTUATIONS OF CATCHES AND POPULATION STRUCTURE OF WALLEYE POLLOCK *THERAGRA CHALCOGRAMMA*FROM THE JAPAN SEA COAST OF HOKKAIDO.] *Nippon Suisan Gakkaishi* 57(11):1991-1995. 1991. In Japanese with English summ. FR 37(2)
[Hokkaido Kushiro Fish. Exp. Stn., Hamacho, Kushiro, Hokkaido 085, Japan]

MARINE MANAGEMENT AND RESEARCH (Continued)

92-003738 Murray, James D.; James J. Bahen and Roger A. Rulifson. MANAGEMENT CONSIDERATIONS FOR BY-CATCH IN THE NORTH CAROLINA AND SOUTHEAST SHRIMP FISHERY. *Fisheries (Bethesda)* 17(1):21-26. 1992. FR 37(2)
[Mar. Advisory Serv. Program, Univ. N.C., Sea Grant Coll. Program, Box 8605, Raleigh 27695]

92-003739 Northwest Atlantic Fisheries Organization. NORTHWEST ATLANTIC FISHERIES ORGANIZATION HANDBOOK. *Northwest Atl. Fish. Organ.* 106p. 1991. FR 37(2)
[NAFO, Dartmouth, NS, Canada]

92-003740 Parisi, E.; C. Pellegrino; A. H. Mohamed and O. A. Mohamed. [PRODUCTION AND HYGIENIC CONTROL OF FISH IN SOMALIA.] *Ind. Alimentari* No. 27. p. 748-759. 1988. In Italian. 1988. From Ann. Fac. Med. Vet. Torino No. 33. p. 461. 1988-1990. FR 37(2)

92-003741 Rosenman, Robert. IMPACTS OF RECREATIONAL FISHING ON THE COMMERCIAL SECTOR: AN EMPIRICAL ANALYSIS OF ATLANTIC MACKEREL. *Nat. Resour. Modeling* 5(2):239-257. 1991. FR 37(2)
[Dep. Econ., Wash. State Univ., Pullman 99164-4860] *Scomber scombrus.*

92-003742 Shigonova, T. A. and N. V. Kovalevskaya. LARVAE AND JUVENILES OF BELONIFORMES FROM THE NORTHEASTERN ATLANTIC. *J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.)* 31(4):12-21. 1991. FR 37(2)
[Inst. Oceanol., Acad. Sci. USSR-IOAN, Moscow, USSR] *Scomberesox saurus saurus, Nanichthys simulans, Oxyporhamphus micropterus similis, Exocoetus obtusirostris, E. volitans, Prognichthys gibbifrons, Cypselurus exsiliens, C. furcatus,* and *Hirundichthys speculiger.*

92-003743 Sholto-Douglas, A. D.; J. G. Field; A. G. James and N. J. van der Merwe. $^{13}C/^{12}C$ AND $^{15}N/^{14}N$ ISOTOPE RATIOS IN THE SOUTHERN BENGUELA ECOSYSTEM: INDICATORS OF FOOD WEB RELATIONSHIPS AMONG DIFFERENT SIZE-CLASSES OF PLANKTON AND PELAGIC FISH; DIFFERENCES BETWEEN FISH MUSCLE AND BONE COLLAGEN TISSUES. *Mar. Ecol. Prog. Ser.* 78(1):23-31. 1991. FR 37(2)
[Mar. Biol. Res. Inst., Dep. Zool., Univ. Cape Town, Rondebosch 7700, South Africa] *Engraulis capensis* and *Etrumeus whiteheadi* in Africa.

92-003744 Swartz, David George. A MARINE RECREATIONAL FISHERIES DECISION SUPPORT SYSTEM. *Ph.D. dissertation, Univ. Md. (College Park)* 219p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(9):4655. 1992. Order No. DA9205131. FR 37(2)

92-003745 Unwin, Martin. SALMON BY-CATCH - AN AGREEMENT FOR 1991/92. *Freshwater Catch* No. 47. p. 6-9. 1991. FR 37(2)
[MAF Fish., Freshwater Cent., Christchurch, New Zealand]

92-003746 Vose, F. E.; P. M. Navratil and W. G. Nelson. FISH RECRUITMENT AND IMPACT TO BENTHIC INFAUNA SURROUNDING STABILIZED OIL ASH REEFS (SOAR). *Proc. Annu. Meet. Assoc. Island Mar. Lab. Caribb.* No. 21. p. 29. 1988. English and Spanish abstract only. FR 37(2)
[Fla. Inst. Technol., Melbourne] *Chaetodipterus faber* and *Orthopristis chrysoptera* in Florida.

UTILIZATION OF FISHERY PRODUCTS

92-003747 Ali, Ayub; Indrani Karunasagar and Iddya Karunasagar. BACTERIOLOGICAL CHANGES DURING ICED STORAGE OF THE TROPICAL FRESH WATER CARP *LABEO ROHITA. Fish. Res.* 13(2):189-197. 1992. FR 37(2)
[Iddya Karunasagar: Dep. Fish. Microbiol., Coll. Fish., Mangalore-575 002, India]

92-003748 Ando, Masashi; Haruhiko Toyohara; Yutaka Shimizu and Morihiko Sakaguchi. VALIDITY OF A PUNCTURE TEST FOR EVALUATING CHANGE IN MUSCLE FIRMNESS OF FISH DURING ICE STORAGE. *Nippon Suisan Gakkaishi* 57(12):2341. 1991. In English with Japanese summ. FR 37(2)
[Lab. Fish. Chem., Dep. Fish., Fac. Agric., Kyoto Univ., Kitashirakawa, Sakyo, Kyoto 606, Japan] *Oncorhynchus mykiss.*

92-003749 Heiser, J. B. and F. Martini. THE SKINNEY ON WALLETS: AN EXAMINATION OF EELSKIN USED IN THE LEATHER INDUSTRY. *Am. Zool.* 31(5):96A. 1991. Abstract only. FR 37(2)
[Shoals Mar. Lab., Cornell Univ., Ithaca, NY] *Myxine glutinosa.*

92-003750 Ingemansson, Torbjorn; N. Urban Olsson; Bengt G. Herslof and Bo Ekstrand. LIPIDS IN LIGHT AND DARK MUSCLE OF FARMED RAINBOW TROUT (*ONCORHYNCHUS MYKISS*). *J. Sci. Food Agric.* 57(3):443-447. 1991. FR 37(2)
[Ekstrand: SIK Swedish Inst. Food Res., Gothenburg, Sweden]

92-003751 Liu, Ming-Sai; Ru-Yin Chen; Meei-Ju Tsai and Jui-Sen Yang. EFFECT OF GAMMA IRRADIATION ON THE KEEPING QUALITY AND NUTRIENTS OF TILAPIA (*OREOCHROMIS MOSSAMBICUS*) AND SILVER CARP (*HYPOPHTHALMICHTHYS MOLITRIX*) STORED AT 1ÉC. *J. Sci. Food Agric.* 57(4):555-563. 1991. FR 37(2)
[Food Ind. Res. & Dev. Inst., P.O. Box 246, Hsinchu 30099, Taiwan]

UTILIZATION OF FISHERY PRODUCTS (Continued)

92-003752 Maragal, M. M.; T. C. Chandrasekhar and K. V. Saralaya. STUDIES ON THE PRESERVATION OF FISH SAUSAGE IN NATURAL CASING WITH CHEMICAL PRESERVATIVES AND SMOKING. *Mysore J. Agric. Sci.* 22(4):530-537. 1988. FR 37(2)

[Dep. Fish Processing Technol., Coll. Fish., Mangalore, India]

92-003753 Niwa, Eiji; Alam AKM Nowsad and Satoshi Kanoh. CHANGES IN THE VISCO-ELASTIC PROPERTIES OF SALTED FISH FLESH SOL DURING ITS LOW TEMPERATURE SETTING. *Nippon Suisan Gakkaishi* 57(12):2333-2336. 1991. In English with Japanese summ. FR 37(2)

[Fac. Bioresour., Mie Univ., Kamihama, Tsu, Mie 514, Japan]

92-003754 Peavey, Stephanie and Therese Work. A STUDY OF CONSUMER RESPONSE TO VALUE-ADDED SALMON PRODUCTS. *J. World Aquacult. Soc.* 22(3):46A. 1991. Abstract only. FR 37(2)

[Dep. Agric. & Resour. Econ., Univ. Maine, Orono 04469]

92-003755 Pellegrino, C.; V. Giaccone and N. Ponzoni. [MICROBIOLOGICAL ANALYSIS OF READY-TO-USE COD-FISH. 2ND.] *Ind. Alimentari* No. 27. p. 629-633. 1988. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 460-461. 1988-1990. FR 37(2)

92-003756 Pellegrino, C.; V. Giaccone and N. Ponzoni. [MICROBIOLOGICAL ANALYSIS OF READY-TO-USE COD-FISH. 1ST.] *Ind. Alimentari* No. 27. p. 541-546. 1988. In Italian. From Ann. Fac. Med. Vet. Torino No. 33. p. 460. 1988-1990. FR 37(2)

92-003757 Pellegrino, C.; V. Giaccone and E. Parisi. [PACKAGING FISH PRODUCTS IN MODIFIED ATMOSPHERES. SURVEY OF THE LITERATURE AND RESULTS OF A STORAGE EXPERIMENT WITH REHYDRATED SALTED COD FILLETS.] *Fleischwirtschaft.* 70(11):1340-1346. 1990. In German. From Ann. Fac. Med. Vet. Torino No. 33. p. 468-469. 1988-1990. FR 37(2)

92-003758 Perschbacher, Peter W.; Julie K. Collins and Wendell J. Lorio. WATER LOSS AND SURFACE CHARACTERISTICS OF FROZEN CHANNEL CATFISH FILLETS VACUUM-TUMBLED WITH SODIUM TRIPOLYPHOSPHATE. *J. World Aquacult. Soc.* 22(3):47A. 1991. Abstract only. FR 37(2)

[U.S. Dep. Agric., Agric. Res. Serv., Tishomingo, OK 73460] *Ictalurus punctatus.*

92-003759 Plahar, Wisdom A.; Ralphenia D. Pace and John Y. Lu. EFFECT OF STORAGE CONDITIONS ON THE QUALITY OF SMOKE-DRIED HERRING (*SARDINELLA EBA*). *J. Sci. Food Agric.* 57(4):597-610. 1991. FR 37(2)

[Lu: Dep. Home Econ., Tuskegee Univ., Tuskegee, AL 36088]

92-003760 Reddy, N. R.; D. J. Armstrong; E. J. Rhodehamel and D. A. Kautter. SHELF-LIFE EXTENSION AND SAFETY CONCERNS ABOUT FRESH FISHERY PRODUCTS PACKAGED UNDER MODIFIED ATMOSPHERES: A REVIEW. *J. Food Saf.* 12(2):87-118. 1992. FR 37(2)

[Food Eng. Branch, Food & Drug Admin., 6502 S. Archer Ave., Summit-Argo, IL 60501]

92-003761 Reinert, Robert E.; Barbara A. Knuth; Michael A. Kamrin and Quentin J. Stober. RISK ASSESSMENT, RISK MANAGEMENT, AND FISH CONSUMPTION ADVISORIES IN THE UNITED STATES. *Fisheries (Bethesda)* 16(6):5-12. 1991. FR 37(2)

[For. Resour., Univ. Ga., Athens 30602]

92-003762 Sylvia, Gilbert and Thomas Graham. MARKETING MANAGEMENT IMPLICATIONS FOR PRIMARY AND SECONDARY SALMON PRODUCTS BASED ON EVALUATION OF CONSUMER PREFERENCES, PROXIMAL ANALYSIS, AND SENSORY EVALUATION FOR THREE TYPES OF CULTURED AND CAPTURED SALMON. *J. World Aquacult. Soc.* 22(3):57A. 1991. Abstract only. FR 37(2)

[Coastal Mar. Exp. Stn., Oreg. State Univ., Hatfield Mar. Sci. Cent., Newport 97365] *Oncorhynchus tshawytscha* and *Salmo salar.*

92-003763 Voiland, Michael P., Jr.; Ken L. Gall; Donald J. Lisk and David B. MacNeill. EFFECTIVENESS OF RECOMMENDED FAT-TRIMMING PROCEDURES ON THE REDUCTION OF PCB AND MIREX LEVELS IN BROWN TROUT (*SALMO TRUTTA*) FROM LAKE ONTARIO. *J. Great Lakes Res.* 17(4):454-460. 1991. FR 37(2)

[Dep. Nat. Resour., Cornell Univ., Ithaca, NY 14853]

MISC. TECHNIQUES AND EQUIPMENT

92-003764 Armour, Carl L. GUIDANCE FOR EVALUATING AND RECOMMENDING TEMPERATURE REGIMES TO PROTECT FISH. *U.S. Fish Wildl. Serv. Biol. Rep.* 90(22):13p. 1991. Available from Publ. Unit., U.S. Fish & Wildl. Serv., 1849C St. N.W., Mail Stop 130-ARLSQ, Washington, DC 20240. FR 37(2)

[U.S. Fish & Wildl. Serv., Natl. Ecol. Res. Cent., 4512 McMurray Ave., Fort Collins, CO 80525-3400] *Oncorhynchus tshawytscha.*

MISC. TECHNIQUES AND EQUIPMENT (Continued)

92-003765 Bauchot, M. L.; M. Desoutter; D. F. Hoese and H. K. Larson. [REVIEW OF THE CATALOGUE OF TYPES OF FISHES IN THE NATIONAL MUSEUM OF NATURAL HISTORY (FRANCE).] *Bull. Mus. Natl. Hist. Nat. Sect. A Zool. Biol. Ecol. Anim.* 13(1-2):1-82. 1991. In French. FR 37(2)
[Lab. Ichtyol. Gen. & Appl., Mus. Natl. Hist. Nat., 43 rue Cuvier, 75231 Paris Cedex 05, France]

92-003766 Bortone, Stephen A.; Tony Martin and Charles M. Bundrick. VISUAL CENSUS OF REEF FISH ASSEMBLAGES: A COMPARISON OF SLATE, AUDIO, AND VIDEO RECORDING DEVICES. *Northeast Gulf Sci.* 12(1):17-23. 1991. FR 37(2)
[Dep. Biol., Univ. W. Fla., Pensacola 32514]

92-003767 Dibble, Eric D. A COMPARISON OF DIVING AND ROTENONE METHODS FOR DETERMINING RELATIVE ABUNDANCE OF FISH. *Trans. Am. Fish. Soc.* 120(5):663-666. 1991. FR 37(2)
[Coop. Fish & Wildl. Res. Unit, Biol. Sci. Dep., Univ. Arkansas, Fayetteville 72701]

92-003768 Foote, Kenneth G. SUMMARY OF METHODS FOR DETERMINING FISH TARGET STRENGTH AT ULTRASONIC FREQUENCIES. *J. Cons. Cons. Int. Explor. Mer* 48(2):211-217. 1991. FR 37(2)
[Inst. Mar. Res., P.O. Box 1870, Nordnes, N-5024 Bergen, Norway]

92-003769 Fomeris, Gilberto; Marcella Boccignone; Giovanni B. Palmegiano and Giuliana Quaglino. [METHODS FOR THE ASSESSMENT OF NUTRIENT DIGESTIBILITY IN FISH.] *Ann. Fac. Med. Vet. Torino* No. 33. p. 147-158. 1988-1990. In Italian with English summ. FR 37(2)
[Univ. Torino, Dip. Prod. Anim., Ispezione & Igiene Vet., Fac. Med. Vet. Torino, Torino, Italy]

92-003770 Herrmann, David P.; Robert W. Sites and Michael R. Willig. A LABORATORY FLOW TANK WITH VARIABLE CURRENT AND DEPTHS FOR REPLICATING RIFFLES AND SHALLOW STREAMS. *Tex. J. Sci.* 44(1):89-94. 1992. FR 37(2)
[Dep. Agron., Horticult. & Entomol., Tex. Tech Univ., Lubbock 79409-2134]

92-003771 Hill, Jeffrey P. and William J. Matter. A LOW-COST WEIR FOR SALMON AND STEELHEAD. *Prog. Fish-Cult.* 53(4):255-258. 1991. FR 37(2)
[Dep. Biol. Sci., Idaho State Univ., Pocatello 83209] *Oncorhynchus* and *O. mykiss.*

92-003772 Kangas, P. C.; L. Vanover and V. A. Kimler. DISTRIBUTION OF NEUROMASS IN A MICHIGAN STREAM ECOSYSTEM. *BioSystems* 26(3):155-158. 1992. FR 37(2)
[Nat. Resour. Manage. Program, 0218 Symons Hall, Univ. Md., College Park 20742]

92-003773 Monteiro, Pedro M. S.; Andrew G. James; A. Dawn Sholto-Douglas and John G. Field. THE $\delta^{13}C$ TROPHIC POSITION ISOTOPE SPECTRUM AS A TOOL TO DEFINE AND QUANTIFY CARBON PATHWAYS IN MARINE FOOD WEBS. *Mar. Ecol. Prog. Ser.* 78(1):33-40. 1991. FR 37(2)
[Sea Fish. Res. Inst., Private Bag X2, Rogge Bay 8012, Cape Town, South Africa] *Engraulis capensis* in Africa.

92-003774 Ong, Tun Liang. A PATTERN RECOGNITION APPROACH TO STOCK IDENTIFICATION OF ATLANTIC SALMON, *SALMO SALAR* L., BASED ON DERIVED MORPHOMETRIC FEATURES OF SCALES. *Ph.D. dissertation, Univ. R.I.* 291p. 1991. From Diss. Abstr. Int. B Sci. Eng. 52(8):4056. 1992. Order No. DA9202991. FR 37(2)

92-003775 Persat, Henri. THE EFFICIENCY OF ELECTRIC FISHING IN FISH POPULATION STUDIES: AN EXPERIMENT ON GRAYLING *(THYMALLUS THYMALLUS). Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2432-2436. 1989. FR 37(2)
[URA CNRS 367, Ecol. Eaux douces, Univ. Claude Bernard Lyon 1, 69622 Villeurbanne Cedex, France]

92-003776 Reddin, D. G.; M. F. O'Connell and D. A. Dunkley. ASSESSMENT OF AN AUTOMATED FISH COUNTER IN A CANADIAN RIVER. *Aquacult. Fish. Manage.* 23(1):113-121. 1992. FR 37(2)
[Sci. Branch, Dep. Fish. & Oceans, P.O. Box 5667, St. John's, NF, Canada A1C 5X1]

92-003777 Valcarce, Ron; Douglas Stevenson; Grant Gill Smith and John W. Sigler. DISCRIMINANT SEPARATION OF FISHES: A PRELIMINARY STUDY OF FISH EGGS BY CURIE-POINT PYROLYSIS-MASS SPECTROMETRY-CHEMOMETRIC ANALYSIS. *Trans. Am. Fish. Soc.* 120(6):796-802. 1991. FR 37(2)
[Sigler: Spectrum Sci. & Software Inc., Environ. Sci. & Technol. Group, 1780 N. Research Pkwy., Suite 106, Logan, UT 84321] *Ptychocheilus lucius, Gila robusta jordani* and *Oncorhynchus clarki.*

92-003778 Workman, Ian K. and John W. Watson. CONSTRUCTION AND OPERATION OF A TWO-PLACE DIVER'S SLED. *Mar. Fish. Rev.* 53(2):16-24. 1991. FR 37(2)
[Southeast Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, P.O. Drawer 1207, Pascagoula, MS 39568-1207]

REVIEWS, BIBLIOGRAPHIES, ETC.

92-003779 Coche, Andre G., compiler. AQUACULTURE IN MARINE WATERS: A LIST OF SELECTED REFERENCE BOOKS AND MONOGRAPHS, 1961-1991. *FAO Fish. Circ.* 723(Rev. 4):56p. 1991. FR 37(2)

REVIEWS, BIBLIOGRAPHIES, ETC. (Continued)

92-003780 Saint-Paul, U. AQUACULTURE IN LATIN AMERICA, BIBLIOGRAPHY. *Spec. Publ. Eur. Aquacult. Soc.* No. 13. 434p. 1990. From Anim. Breed. Abstr. 60(1):682. 1992. FR 37(2)
[Max-Planck Inst. Limnol., Postfach 164, 2320 Plon, Germany]

WATERSHED MANAGEMENT

92-003781 Behnke, Robert. ROOTS, ORIGINS, AND MANAGEMENT OF *SALMO TRUTTA*, OUR MOST VERSATILE SPECIES OF TROUT. *Trout. Comm. South. Div. Am. Fish. Soc.* p. 1-2. 1990. FR 37(2)
[Dep. Fish. & Wild. Biol., Colo. State Univ., Fort Collins 80523]

WATER USE AND CONSERVATION

92-003782 Ryder, R. A. NORTH TEMPERATE LAKES AT RISK: A NEW ROLE FOR FISHERIES MANAGERS IN THE 1990'S. *Finn. Fish. Res.* Vol. 12. p. 1-9. 1991. FR 37(2)
[Ontario Minist. Nat. Resour., Res. Stn., P.O. Box 2089, Thunder Bay, ON, Canada P7B 5E7]

MISCELLANEOUS

92-003783 Balderas, Salvador Contreras. CONSERVATION OF MEXICAN FRESHWATER FISHES: SOME PROTECTED SITES AND SPECIES, AND RECENT FEDERAL LEGISLATION. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 191-197. 1991. FR 37(2)
[Univ. Autonoma Nuevo Leon, Dep. Biol., Monterrey, Nuevo Leon, Mexico]

92-003784 Bean, Michael J. THE POLITICAL FUTURE OF THE ENDANGERED SPECIES ACT. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 92-98. 1991. FR 37(2)

92-003785 Dane, Charles W. OFFICE OF SCIENTIFIC AUTHORITY: ITS FUNCTIONS AND ITS ROLE IN THE PERMIT PROCESS. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 357-361. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Mail Stop 725, ARLSQ, Washington, DC 20240]

92-003786 Deacon, James E. and Cynthia Deacon Williams. ASH MEADOWS AND THE LEGACY OF THE DEVILS HOLE PUPFISH. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 69-87. 1991. FR 37(2)
[Univ. Nev., Dep. Biol. Sci., Las Vegas 89154] *Cyprinodon diabolis, Rhinichthys osculus nevadensis* and *Empetrichthys merriami* in Nevada.

92-003787 Deacon, James E. and W. L. Minckley. WESTERN FISHES AND THE REAL WORLD: THE ENIGMA OF "ENDANGERED SPECIES" REVISTED. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 405-413. 1991. FR 37(2)
[Univ. Nev., Dep. Biol. Sci., Las Vegas 89154]

92-003788 Herzig-Straschil, Barbara. RARE AND ENDANGERED FISHES OF AUSTRIA. *Int. Ver. Theor. Angew. Limnol. Verh.* 24(4):2501-2504. 1989. FR 37(2)
[Naturhist. Mus. Wien, 1 Zool. Abt., Burgring 7, Postfach 417, A-1014 Vienna, Austria]

92-003789 Johnson, James E. and Buddy Lee Jensen. HATCHERIES FOR ENDANGERED FRESHWATER FISHES. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 199-217. 1991. FR 37(2)
[Univ. Arkansas, Coop. Fish. Unit & Dep. Zool., Fayetteville 72701]

92-003790 Minckley, W. L.; Paul C. Marsh; James E. Brooks; James E. Johnson and Buddy Lee Jensen. MANAGEMENT TOWARD RECOVERY OF THE RAZORBACK SUCKER. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 303-357. 1991. FR 37(2)
[Ariz. State Univ., Dep. Zool., Tempe 85287] *Xyrauchen texanus* in the United States.

92-003791 Minckley, W. L. and Michael E. Douglas. DISCOVERY AND EXTINCTION OF WESTERN FISHES: A BLINK OF THE EYE IN GEOLOGIC TIME. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 1-17. 1991. FR 37(2)
[Ariz. State Univ., Dep. Zool., Tempe 85287]

92-003792 Minckley, W. L. and James E. Deacon, editors. BATTLE AGAINST EXTINCTION: NATIVE FISH MANAGEMENT IN THE AMERICAN WEST. *Univ. Ariz. Press* 517p. 1991. Available at $40.00 (cloth) from Univ. Ariz. Press, 1230 N. Park Ave., #102, Tucson 85719. FR 37(2)
[Ariz. State Univ., Dep. Zool., Tempe 85287] Individual chapters indexed in this issue of *Fisheries Review.*

92-003793 Nehlsen, Willa; Jack E. Williams and James A. Lichatowich. PACIFIC SALMON AT THE CROSSROADS: STOCKS AT RISK FROM CALIFORNIA, OREGON, IDAHO, AND WASHINGTON. *Trout* 33(1):24-51. 1992. FR 37(2)
Oncorhynchus.

MISCELLANEOUS (Continued)

92-003794 Robinson, Richard K. CAPTIVE-BRED WILDLIFE REGISTRATIONS: WHAT DO WE DO WITH THEM? *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 350-356. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., 4401 N. Fairfax Dr., Arlington, VA 22203]

92-003795 Scoppettone, G. Gary and Gary Vinyard. LIFE HISTORY AND MANAGEMENT OF FOUR ENDANGERED LACUSTRINE SUCKERS. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 359-377. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., 4600 Kietzke Ln., Reno, NV 89502] *Chasmistes liorus, C. cujus, C. brevirostris,* and *Deltistes luxatus* in the United States.

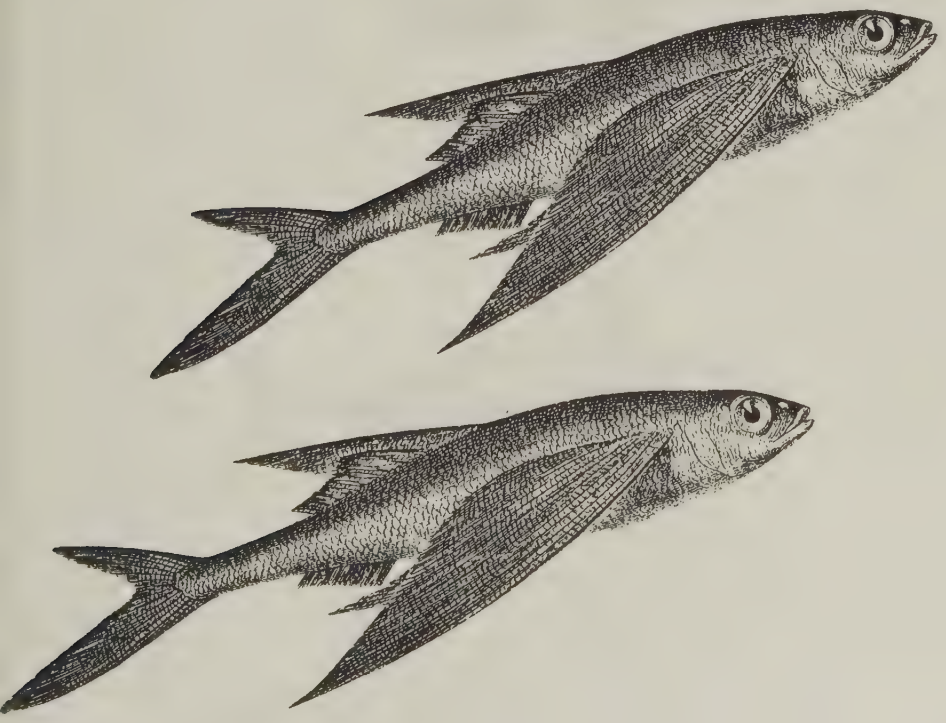
92-003796 Sutton, Michael and Leslie Harroun. THE GLOBAL IMPORTANCE OF THE ENDANGERED SPECIES ACT. *AAZPA (Am. Assoc. Zool. Parks Aquariums) Annu. Proc.* p. 99-100. 1991. FR 37(2)
[WWF, 1250 24th St., N.W., Washington, DC 20037]

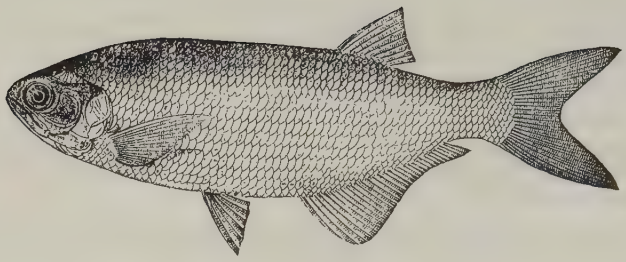
92-003797 Swain, Hilary. RARE, THREATENED AND ENDANGERED SPECIES IN FLORIDA; THE LOCAL PERSPECTIVE. *Fla. Sci.* 55(Suppl. 1):28-29. 1992. Abstract only. FR 37(2)
[Dep. Biol. Sci., Fla. Inst. Technol., Melbourne 32901]

92-003798 Tyus, Harold M. ECOLOGY AND MANAGEMENT OF COLORADO SQUAWFISH. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 379-402. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Colo. River Fish. Proj., 1680 W. Hwy. 40, Rm. 1210, Vernal, UT 84078] *Ptychocheilus lucius* in Utah, Colorado, and Wyoming.

92-003799 Williams, Cynthia Deacon and James E. Deacon. ETHICS, FEDERAL LEGISLATION, AND LITIGATION IN THE BATTLE AGAINST EXTINCTION. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 109-121. 1991. FR 37(2)
[U.S. For. Serv., Natl. Fish. Program, 14th St. & Independence Ave., S.W., Washington, DC 20090]

92-003800 Wydoski, Richard S. and John Hamill. EVOLUTION OF A COOPERATIVE RECOVERY PROGRAM FOR ENDANGERED FISHES IN THE UPPER COLORADO RIVER BASIN. *In: Battle Against Extinction: Native Fish Management in the American West. W. L. Minckley and James E. Deacon, editors.* p. 123-135. 1991. FR 37(2)
[U.S. Fish & Wildl. Serv., Denver Fed. Cent., P.O. Box 25486, Denver, CO 80225] *Ptychocheilus lucius, Gila cypha, G. elegans* and *Xyrauchen texanus* in Colorado, Wyoming, and Utah.





Aartila, Thomas P.
92-003625
Abate, M. E.
92-002772
Abbey, D. H.
92-003624
Abe, Hiroki
92-002402
92-002403
92-002404
Aber, Vicki
92-002235
Able, K. W.
92-003087
Aborah, K. S.
92-003369
Abrami, G.
92-002405
Abrams, J. G.
92-002584
Abrams, Peter A.
92-003587
Acher, R.
92-002601
Adamicka, Peter
92-003649
Adams, James Joseph, Jr.
92-002773
Addink, Albert D. F.
92-002646
Adjavon, Vewonyi
92-002130
Adjers, Kaj
92-002098
92-003315
Adriaensen, Dirk
92-002605
Agradi, E.
92-002405
Aguilar, A.
92-003568
Aguilar, Alex
92-003574
Ahmad, Abu Talib
92-002167
Ahmad, Taufik
92-002670
Ahnelt, Harald
92-003048
92-003049
Aida, Katsumi
92-002407
92-002794
92-002865
Ainsworth, A. J.
92-003168
Ainsworth, A. Jerald
92-003143
Airey, J. A.
92-002669
Ajmerito, P.
92-003253
Akimoto, M.
92-003213
Akiyama, Dean M.
92-002168
Akkerman, Ida
92-003272
Akpocha, Benedicta O.
92-002148
Al-Goshae, H.
92-002319
Alanara, Anders
92-002169
Alba, Francisco
92-002033
Albert, Richard C.
92-003273
Albright, L. J.
92-003153
Alcobendas, Marina
92-003522
Aldegunde, M.
92-002617
Aldenberg, Tom
92-003441
Alderman, D. J.
92-003229
Alekperov, A. P.
92-002902
Alekseyev, S. S.
92-002320
Alessi, Dawn E.
92-002120
Alessio, G.
92-003287
Ali, Ayub
92-003747
Allen, Kathleen N.
92-003380
Allen, M. James
92-002888
Allen, Mike
92-003454
Allendorf, F. W.
92-002704
92-002705
Allendorf, Fred W.
92-003528
Alm, Jukka
92-003321
Almada, Vitor C.
92-002774
92-002775
Almeida-Toledo, L. F.
92-002745
Alvarado L., V.
92-002061
Alvarino, J. M. R.
92-002406
Amano, Masafumi
92-002407
Amat, F.
92-002202
Amin, Omar M.
92-003214
92-003215
92-003216
92-003217
Amores-Serrano, Raul Ramon
92-003650
Amthauer, Rodolfo
92-002650
Amundson, C. H.
92-002085
Amundson, Clyde H.
92-002125
92-002190
92-002415
Amyes, S. G. B.
92-003125
Anadon, Ramon
92-002339
Andersen, K. I.
92-003218
Andersen, Sigbjorn
92-002484
Anderson, B. S.
92-002160
Anderson, Douglas P.
92-002408

Anderson, J. L.
92-002062
Anderson, R. S.
92-003422
Andersson, L.
92-003368
Andersson, Tord
92-003289
Ando, Masashi
92-003748
Andres, M. D.
92-002617
Andreyev, Victor
92-003017
Aneshansley, Daniel J.
92-002259
Angel Palacios, M.
92-003210
Angelow, Roy V.
92-003332
Ankley, Gerald T.
92-003274
Anselmino, M.
92-002097
Aoki, Takashi
92-002769
Arai, Katsutoshi
92-002671
92-002672
Arakawa, C. K.
92-003159
Arav, A.
92-002602
Archer, S. N.
92-002580
Arieli, Y.
92-002226
Aristizabal Abud, E. O.
92-002409
Arkoosh, M. R.
92-003126
Armour, Carl L.
92-003764
Armstrong, D. J.
92-003760
Armstrong, D. W.
92-002985
Armstrong, J. D.
92-003523
Arnason, A. N.
92-002095
92-003612
Arnason, A. Neil
92-003588
Arnesen, Petter
92-002170
Arnold, C. R.
92-002441
Arreguin-Sanchez, F.
92-003589
Arruda, Luis M.
92-003018
Arthington, A. H.
92-003671
Arthington, Angela H.
92-003529
Arumugam, Phillip T.
92-002171
Asanov, A. Yu.
92-002941
Asbaugh, Nick
92-003305
Aschot, Simonian
92-003647
Asgard, Torbjorn
92-002489
Astier, Catherine
92-002410
Asztalos, B.
92-003435
Atland, A.
92-003333
Atlantic Salmon Federation
92-003472
Atsuta, S.
92-003173
Atsuta, Shizuo
92-003157
Attar, Khudre M.
92-003275
Audet, Celine
92-003383
Augustijn-Beckers, P. W. M.
92-003448
Auster, P. J.
92-002776
Austin, B.
92-003124
Avault, James W., Jr.
92-002111
92-002254
Avise, John C.
92-002673
92-002674
92-002750
Avrameas, Stratis
92-003151
Awakura, T.
92-003113
Axelrod, Herbert R.
92-002236
Ayvazian, Suzanne G.
92-002321
Ayyappan, S.
92-002117
Azevedo, Jose N.
92-003018
Azoulay, B.
92-003630
Azuma, Hiroshi
92-002237
Azuma, Teruo
92-003564
Azzarello, Marie Y.
92-002411
Babish, J. G.
92-002429
Bacalbasa-Dobrovici, Nicolae
92-003692
Bachman, Robert A.
92-003480
Backman, Steve
92-003162
Bader, Joel A.
92-003334
Bagliniere, Jean-Luc
92-002777
Baguet, F.
92-002549
Bahen, James J.
92-003579
92-003738
Bailey, Donald S.
92-002293
Bailey, J. K.
92-002076
Bailey, Richard F. J.
92-002843
Baird, Ronald C.
92-003600
Baird, T.
92-002652

Baisre, Julio A.
92-002034
Baker, Debra
92-003690
Baker, Timothy T.
92-003495
Bakke, Siri
92-003322
Balakhnin, I. A.
92-002412
Balasubramanian, S.
92-002112
Balcer, Mary D.
92-003274
Balderas, Salvador Contreras
92-003783
Ballantyne, J. S.
92-002413
92-002414
Balment, Richard J.
92-002444
Balon, Eugene K.
92-002675
Balushkin, A. V.
92-002322
Balykina, N. V.
92-003713
Bandin, Isabel
92-003160
Banister, C.
92-003651
Banks, J. L.
92-002270
Bannatyne, Sandra A.
92-003588
Bannikov, A. F.
92-003090
Baradat, M.
92-003349
Barak, N. A.-E.
92-002889
Barannikova, I. A.
92-002462
Barata, Eduardo N.
92-002774
92-002775
Barbi, Josef W.
92-002172
Bardach, John E.
92-003714
Bardonnet, Agnes
92-002778
Baretta, J. W.
92-003605
Barghigiani, C.
92-003335
Barja, J. L.
92-003198
Barja, Juan L.
92-003160
Barker, D.
92-003390
Barker, Gavin
92-002065
Barker, Paul
92-002238
Barlaup, B. T.
92-003333
Barnard, E. A.
92-002455
Barnes, A. C.
92-003125
Barnett, Jimmy
92-002734
Barrett, Bruce M.
92-003496
Barry, Terence P.
92-002415
Barsukov, V. V.
92-002323
Barthelemy, Lucien
92-002608
Bartholomew, J. L.
92-003126
92-003159
Bartlett, S. E.
92-002719
Barus, Vlastimil
92-002816
Basiao, Z.
92-002698
Basseres, Anne
92-002467
Bath, Hans
92-003091
Batterson, T. R.
92-002123
92-002129
Bauchot, M. L.
92-003765
Bauer, G.
92-003219
Baverstock, Peter R.
92-002724
Baxter, R. M.
92-003276
Bay-Hansen, C. D.
92-003715
Bayliff, William H.
92-003716
Baylor, Donald L.
92-003480
Bayne, David R.
92-002296
92-003325
92-003534
Beacham, Terry D.
92-002676
Beames, Dick M.
92-002219
Beamish, F. William H.
92-002831
Beamish, Frederick W. H.
92-002512
Beamish, Richard J.
92-002921
Bean, Michael J.
92-003784
Beard, Thomas D., Jr.
92-002922
Beavers, Berry F.
92-002734
Beccaria, C.
92-002416
Beck, Jill C.
92-002640
Beckenbach, Andrew T.
92-002677
Becker, K. A.
92-002494
Beckett, David C.
92-003625
Bedell, Gerald W.
92-002063
Beeching, A. J.
92-002748
Behnke, Robert
92-003781
Beitinger, Thomas L.
92-003363
Belikov, S. I.
92-002715

Belkovskiy, N. M.
92-002151
Bell, J. D.
92-002923
92-003731
Bell, J. E.
92-003695
Bell, M. A.
92-002985
Bellardi, Sergio
92-002324
Bello, Giambattista
92-002970
Belpaire, C.
92-003230
Belyanina, T. N.
92-002325
Belyapeva, Ye. S.
92-002326
Bemis, W. E.
92-002327
92-002716
Benard, P.
92-003357
Bence, James R.
92-003032
Bender, Judith A.
92-002207
Benetti, Daniel D.
92-002417
Benfey, Tillmann J.
92-002418
Bengtson, David A.
92-002173
92-002195
Benjamin, M.
92-002328
92-002594
Benjamini, Yoav
92-002991
Benndorf, Jurgen
92-002312
Bennett, Richard O.
92-002634
Bentley, P. J.
92-003336
Bentz, Hans
92-002218
Benyamin, Yves
92-002410
Berg-Lea, Trygve
92-002204
92-002990
Berg, James D.
92-003322
Bergander, Fred E.
92-003652
Berger, A.
92-002821
Bergheim, Asbjorn
92-002255
92-002267
Bergin, Joseph D.
92-002678
Berglund, I.
92-002419
Bergstad, O. A.
92-003052
Berhaut, Jocelyne
92-003394
92-003395
Berkes, Fikret
92-003455
Bern, Howard A.
92-002420
Bernacsek, G. M.
92-003469
Bernard, Kathryn A.
92-003162
Bernardi, Giacomo
92-002679
92-002680
Bernardi, Giorgio
92-002679
92-002680
Bernat, Gabriel
92-002143
Berrebi, Patrick
92-002731
Bertolini, B.
92-002330
Bertolotti, P. P.
92-003253
Bestgen, Kevin R.
92-002692
92-003526
Betka, M.
92-002495
Betsill, Robert K.
92-003083
Bettoli, Phillip W.
92-003083
Beverley-Burton, M.
92-003225
Bialokoz, Witold
92-002971
Billard, R.
92-002421
92-002595
Billard, Roland
92-002422
Billingsley, Craig W.
92-003509
Billington, Neil
92-002681
92-003530
Binkley, James
92-003312
Binns, N. Allen
92-003474
Biro, Peter
92-002779
92-003640
92-003642
Bisbal, Gustavo
92-002173
Bisogni, James J., Jr.
92-002259
Biswas, J.
92-002423
Bjerregaard, Poul
92-003411
Bjorge, Arne
92-003565
Bjorklund, H. V.
92-003127
Bjornn, T. C.
92-003475
Bjornsson, Bjorn Th.
92-002104
Blaber, S. J. M.
92-003005
Black, E. A.
92-002232
Blackshaw, A. W.
92-002307
Blake, R. W.
92-002793
Blanco, G.
92-002682

Blaugrund, E.
92-002424
Blazer, V. S.
92-003170
Bleckmann, H.
92-002329
Bleeker, J.
92-002969
Block, B. A.
92-002644
Block, Mats
92-003337
Blom, Anne K.
92-002628
Blouw, D. M.
92-002683
Bly, Jan E.
92-002547
Blythe, William G.
92-002425
Boccignone, M.
92-002097
92-002426
Boccignone, Marcella
92-003769
Bocquene, Gilles
92-003338
Bodle, Jack
92-002093
Boeger, W. A.
92-003240
Boersma, M.
92-003626
Boeters, R. E. A. M.
92-003476
Bogdanska-Duma, J. J.
92-002507
Boge, G.
92-003339
Boggs, Christofer H.
92-002427
Boglione, C.
92-002330
Bogutskaya, H. G.
92-002331
Bogutskaya, N. G.
92-002332
Bohlen, Jorg
92-003074
Bohling, Paula
92-003566
Boker, Rachel
92-002451
Bolis, L.
92-002405
Bolivar, Maria Edna C.
92-002183
Bolker, J. A.
92-002333
Bolker, Jessica A.
92-002334
Boltachev, A. R.
92-003703
Bonami, Jean Robert
92-003331
Bondarenko, Ye. P.
92-002360
Bondestam, Maria
92-002098
92-003315
Booman, Clelia
92-002780
Booms, G. H. R.
92-002396
Booth, David J.
92-002781
Borawa, James C.
92-003075
92-003653
Borg, B
92-002419
Borgatti, Anna Rosa
92-002649
Borgese, Elisabeth Mann
92-003717
Borlongan, I. G.
92-002174
Borrebaek, Borgar
92-002628
Borski, Russell J.
92-002428
Bortone, Stephen A.
92-003076
92-003766
Bouchereau, J.-L.
92-002873
Bouguenec, V.
92-002175
Bourgeois, Marty
92-002868
Boutilier, R. G.
92-002643
92-002986
Bowmer, C. T.
92-003320
Bowser, P. R.
92-002429
Boyd, Claude E.
92-003691
Boyd, G. J.
92-002683
Boyer-Bernard, Sylvie
92-003585
Boyle, P. R.
92-003002
Bozek, Michael A.
92-003654
Brabrand, Age
92-003658
Bradley, Edward B.
92-003700
Bradley, Terence M.
92-002382
Bramblett, Robert G.
92-003655
Brandon, M.
92-003497
Brandt, T.
92-002502
Brandt, T. M.
92-002192
Brannas, Eva
92-002064
Branson, Branley Allan
92-002866
Brant Moreira, Narcisa Imaculada
92-003220
92-003226
Braunbeck, Thomas
92-003327
Brazil, J.
92-003168
Brazner, John C.
92-003306
Brett, Michael T.
92-002972
Breuil, Gilles
92-003331
Brewer, D. T.
92-002782
Bridges, Brent B.
92-002435

Bridges, Russ B.
92-002219
Briggs, R. P.
92-003567
Brill, R. W.
92-002453
Bringas, P., Jr.
92-002363
Brito, Alberto
92-003076
Brittain, John E.
92-003341
Bro-Rasmussen, F.
92-003385
Brock, James A.
92-002197
92-003078
Brocklebank, John
92-003162
Brockmeyer, Ronald E., Jr.
92-002838
Broderius, Steven J.
92-003410
Brodin, Lennart
92-002335
Bromage, N.
92-002748
Bromage, Niall
92-002065
Bromage, Niall R.
92-002294
92-002450
Broman, Dag
92-003340
Bronzi, P.
92-002405
Brooke, Larry T.
92-003274
Brooks, James E.
92-003541
92-003790
Brosnan, Margaret E.
92-002619
Broussard, Meryl
92-002055
92-002056
Broussard, Meryl C., Jr.
92-002256
Brown Tommy L.
92-003498
Brown, C. L.
92-002162
Brown, Christopher L.
92-002072
92-002257
Brown, Joseph A.
92-002619
92-002944
Brown, Michael L.
92-002176
Brown, P.
92-002336
Brown, P. B.
92-002192
Brown, Paul B.
92-002177
92-002186
92-002210
Brown, Phyllis
92-002198
Brown, Phyllis R.
92-002551
Brown, R. C.
92-003416
Brown, R. W.
92-003077
Brownell, Charles
92-002158
Brownfield, M. S.
92-002085
Bruhn, C.
92-003352
Brun, B.
92-002687
Brune, David E.
92-002178
92-002262
Brungardt, Thomas B.
92-002839
Bruno, D. W.
92-003221
92-003309
Bryan, C. Frederick
92-003675
Buchanan, Johnny P.
92-003084
Bucher, Franz
92-002871
Buchmann, K.
92-003222
Buck, D. Homer
92-003689
Bucke, D.
92-003174
Budayev, S. V.
92-002215
Bugayev, V. F.
92-003019
Bugenyi, F. W. B.
92-003456
Bugrov, Leonid Yu.
92-002066
Buhler, D. R.
92-003357
Buhler, Donald R.
92-003428
Buijse, Anthonie D.
92-003590
Bull, Keith R.
92-003277
Bulman, C. M.
92-002923
Bundrick, Charles M.
92-003076
92-003766
Bunkley-Williams, Lucy
92-003123
Bunt, S. M.
92-002319
Bunton, T. E.
92-003175
Bunya, T.
92-003166
Burger, Carl V.
92-002299
Burgess, Warren E.
92-003092
Burka, John F.
92-002430
92-002591
Burke, John Selden
92-002783
Burkhead, Noel M.
92-002684
Burnison, B. K.
92-003276
Burridge, Mary E.
92-003093
Burt, J. P.
92-003448
Burtle, G. J.
92-003176

...CONTINUED...
Burtle, G. J.
92-003189
Burton, H. R.
92-003079
Burton, Harry R. IV
92-003318
Burton, Robin
92-002233
Burykin, Yu. B.
92-003718
Bush, Brian
92-003294
Bush, Phillippe G.
92-002166
Butler, David G.
92-002371
Butler, Larry T.
92-003693
Butler, Robert L.
92-003480
Buttler, T. M.
92-003448
Buuk, Barbel
92-002730
Bylund, G.
92-003127
Caddell, Steven M.
92-003022
Caldwell, Colleen A.
92-003136
Call, Daniel J.
92-003274
Call, Susan J.
92-002600
Callard, G. V.
92-002495
Callard, Gloria V.
92-002431
Callard, Ian P.
92-002641
Calvo, J.
92-002432
Camargo, Julio A.
92-003591
Campbell, R. N. B.
92-002973
Campbell, Ronald A.
92-003223
Campesan, Giancarlo
92-003408
Camus, A. C.
92-003224
Capel, M. J.
92-003659
Capo, Thomas R.
92-002230
Capra, M. F.
92-002307
Caputi, N.
92-003536
Carey, J. H.
92-003276
Carey, T. G.
92-002067
Carline, Robert F.
92-002922
92-003278
Carlson, Anthony R.
92-003274
Carmody, G.
92-003483
Carneiro, N. M.
92-002463
Carpenter, Jamie
92-003249
Carragher, J. F.
92-002577
Carrillo, M.
92-002406
Carrillo, Manuel
92-002433
Carter, C. G.
92-002434
92-002552
Carvajal, Juan
92-003114
Casagrande, F.
92-002068
Castanet, J.
92-003522
Castellon, A.
92-002367
Castillo, A. R.
92-002638
Castro, Leonardo R.
92-002924
Cataudella, S.
92-002330
Cattley, Russell C.
92-003362
Cauty, C.
92-002732
Cauvin, E.
92-002685
92-002752
Cech, Joseph J., Jr.
92-002435
Cerrato, Robert M.
92-003592
Cestari, Marta M.
92-002686
Cezilly, F.
92-002687
Chagnon, Norman
92-003382
Chai, Tuu-Jyi
92-002225
Chaine, Eric
92-003531
Chakrabarti, P.
92-003366
Chamberlin, M. E.
92-002413
Chandrasekhar, T. C.
92-003752
Chang, Ching-Fong
92-002258
92-002436
Chang, John P.
92-002514
Chapman, Duane C.
92-003342
Chattopadhyay, U. K.
92-003128
Chauvet, J.
92-002601
Chauvet, M. T.
92-002601
Chavez de Martinez, M. C.
92-002437
Chavez, E. A.
92-003589
Chechun, T. Ya.
92-002935
Chelkowski, Zygmunt
92-003532
Chen, R. D.
92-002768
Chen, Ru-Yin
92-003751

Chen, Shulin
92-002259
Chen, T. T.
92-002688
Chen, Yuh-Lin
92-003447
Chernitskiy, A. G.
92-002151
Chernyaev, M. Zh.
92-003636
Chernyaev, Zh. A.
92-003343
Chevalier, Gaston
92-003383
Chevassus, Bernard
92-003199
Chew, S. F.
92-003344
Chidambaram, S.
92-003433
Chiller, D.
92-002483
Chisholm, Leslie A.
92-003225
Chisnall, Ben
92-003518
Cho, C. Y.
92-002179
Cho, Kwangwoo
92-003572
Cho, Kyung Woo
92-002523
Cho, Yong Chul
92-002152
Choi, Hye Sung
92-003129
Choi, In-Ho
92-002596
92-002597
Chou, Kuo-Chen
92-002438
Choubert, Georges
92-002439
Chourrout, D.
92-002689
Chovanec, A.
92-003676
Christiansen, Curtis C.
92-003279
Christiansen, Jorgen Schou
92-002337
92-002440
Christie, K. E.
92-003209
Christophersen, Berit
92-002628
Chugh, Sukhminder P.
92-003345
Chung, K. S.
92-002441
Chung, M. C. M.
92-002588
Ciapara, I. Higuera
92-003139
Ciepielewski, Wladyslaw
92-003694
Civera, T.
92-002756
Claireaux, Guy
92-002442
Clark, Jerry
92-003510
Clark, Joy
92-003510
Clark, Julia A.
92-002221
Clarke, Craig
92-003029
Clarke, W. C.
92-002069
Claro, Rodolfo
92-002867
Claveau, Robert
92-003162
Clawson, Joe
92-002228
Clayton, G. M.
92-002690
Claytor, R. R.
92-002691
Clem, L. William
92-002547
Cleveland, Laverne
92-003346
Clifton-Hadley, R. S.
92-003174
92-003229
Clifton, Lisa M.
92-002942
Cloud, Joseph G.
92-002592
92-002640
92-002743
Coburn, Miles M.
92-002347
Coche, Andre G.
92-003779
Cochran, Roger C.
92-002443
Coffin, David E.
92-002260
Cofino, Wim
92-003272
Cogan, U.
92-002479
Cogels, Xavier
92-002459
Cohen, Sarah
92-002585
Coleman, David E.
92-002257
Coleman, Richard
92-002050
Coles, William C.
92-002435
Colihueque, Nelson
92-002764
Colijn, Franciscus
92-003272
Coll, J. M.
92-003201
Collie, Nathan L.
92-002599
Collier, John A.
92-002113
Collins, Julie K.
92-003758
Collins, M. T.
92-002085
Collins, Nicholas C.
92-002801
Colt, John E.
92-002261
Colvin, Michael A.
92-002890
92-003511
Comparetta, Valerie
92-003379
Conides, Alexis
92-002223
Conlon, J. Michael
92-002444

Connelly, Nancy A.
92-003498
Connes, R.
92-002416
Conover, D. O.
92-003003
Conover, David O.
92-002904
Consoli, Rotraut A. G. B.
92-002784
Contorni, Mario
92-002555
Cook, Joseph A.
92-002692
Cook, Philip M.
92-003274
Cook, R. H.
92-002070
Coombs, K. A.
92-002076
Cooper, Charles M.
92-003280
Cope, William Gregory
92-003347
Copp, G. H.
92-003656
Copp, Gordon H.
92-002785
92-003657
Coppoolse, J.
92-002187
Corcuera, Javier
92-003574
Cornel, G. E.
92-002071
Cossins, A. R.
92-002543
Cossins, Andrew R.
92-002607
Cosson, J.
92-002595
Cosson, M. P.
92-002595
Cosson, Marie Paule
92-002422
Coston-Clements, Linda
92-003705
Couch, Richard
92-002193
Counselman, Clarence James
92-002445
Cowen, Robert K.
92-002924
Cowey, C. B.
92-002180
Cowley, Darrin J.
92-002446
Coyle, K. O.
92-003000
Craigmill, Arthur
92-003399
Cramer, Jean
92-002230
Cramp, Naomi
92-002724
Crandell, P. A.
92-002077
Crandell, Patricia A.
92-002891
Crandell, Patricia Ann
92-002693
Crane, D. B.
92-003348
Crapon de Caprona, M.-Dominique
92-002851
Cravedi, J. P.
92-003349
Crawford, Drew L.
92-003499
Crawford, W. R.
92-002917
Creswell, R. Leroy
92-002035
Crim, L.
92-002126
Crivelli, A. J.
92-002912
Cronin, M. T. D.
92-003350
Cross, Beverly A.
92-002892
92-002920
Cross, T. F.
92-002694
Crossland, Norman O.
92-003281
Crossman, E. J.
92-003533
Crow, Gerald L.
92-003078
Cruce, William L. R.
92-002622
92-002623
Csaba, G.
92-003130
Culbreath, Lieneke
92-002447
Culter, J. K.
92-003282
Culver, D. A.
92-003015
Cuthill, Innes
92-002786
Czapla, Thomas E.
92-002974
D'Agostino, Giuseppina
92-003389
D'yakov, Yu. P.
92-002893
Daan, N.
92-003719
Dabrowski, K.
92-002448
Dalsgaard, I.
92-003131
Dane, Charles W.
92-003785
Danilowicz, Bret S.
92-002072
Daoutopoulos, George
92-003643
Darlison, M. G.
92-002455
Das Gupta, Chanchal
92-002133
Das, Isita
92-002137
Das, M. S.
92-003128
Davenport, John
92-002338
Davidson, G. A.
92-002449
Davidson, W. S.
92-002719
Davies, A. J.
92-003177
Davies, Briony
92-002065
92-002450

Davies, P. L.
92-002695
Davies, R. L.
92-003132
Davies, William D.
92-002913
Davis, Bruce M.
92-002975
Davis, C. A.
92-002722
Davis, K. B.
92-002636
Davis, Scott A.
92-002113
Davis, W. P.
92-002856
Davlin, Andrew, Jr.
92-002036
Dawley, R.
92-002696
de Araujo Costa, Helio Martins
92-003220
92-003226
de Bruijin, Jack
92-003351
De Charleroy, D.
92-003230
de Courcy Williams, M.
92-002694
De Gregori, I.
92-003352
De Groodt-Lasseel, Marie H. A.
92-002605
de Grooth, Ricardo
92-002408
de la Noue, Joel
92-002439
de Miguel, Encarnacion
92-002339
de Noyelles, Frank
92-003690
de Oliveira, Carmen Lucia
92-003220
92-003226
De Oliveira, Rui F.
92-002774
92-002775
De Ranieri, S.
92-003335
de Silva, K. H. G. M.
92-002894
De Silva, Sena S.
92-003608
de Vries, J. W.
92-003450
de Wolf, Watze
92-003353
92-003354
Deacon, James E.
92-003786
92-003787
92-003792
92-003799
Dearden, J. C.
92-003350
Deban, S. M.
92-002998
Degan, Donald J.
92-002905
Degani, Gad
92-002285
92-002451
92-003020
DeGisi, Joe
92-002966
Delgado, D.
92-003352
DeMarais, Bruce D.
92-002697
Demuynck, Sylvain
92-003355
Denis, Claude
92-002459
Denizeau, Francine
92-003361
Dennis, G. D.
92-003707
Department of Agriculture Northern Ireland
92-003457
Derofeyeva, Ye. A.
92-002384
Desoutter, M.
92-003765
Dessypris, Athanassios
92-002581
Detenbeck, Naomi E.
92-003477
Deutsch, William G.
92-003325
92-003534
Devaraj, K. V.
92-002209
Devlin, Robert H.
92-002737
DeVore, Philip W.
92-003477
Devries, A. L.
92-002602
DeVries, S. H.
92-002452
Dewar, H.
92-002453
Dhainaut-Courtoit, Nicole
92-003355
Di Giulio, Richard T.
92-003362
Diack, J. S. W.
92-003002
Diaz, J. P.
92-002416
Diaz, Nelson
92-002764
92-002925
Dibble, Eric D.
92-003767
Dick, T. A.
92-002095
Dick, Terry A.
92-003120
92-003263
92-003264
Dickhoff, W. W.
92-002460
92-002586
Didier, D. A.
92-002340
Dillaha, Theo A.
92-003283
DiNardo, Gerard Thomas
92-003593
Distefano, Joseph J. III
92-002599
Distel, Daniel L.
92-002496
Ditton, Robert B.
92-003720
Dittrich, B.
92-003409
Ditty, James G.
92-002868

Divakaran, S.
92-002454
Dixon, Beverly
92-003133
Dixon, D. G.
92-003400
92-003402
92-003403
92-003440
Dixon, D. George
92-003417
Djamgoz, M. B. A.
92-002455
92-002661
Do Carmo, Jacqueline A.
92-002784
Dobbs, A. J.
92-003350
Dochoda, Margaret Ross
92-003535
Docker, Margaret F.
92-002831
Dodson, Michael V.
92-002592
Doering, Peter H.
92-002315
Domanico, Alejandro A.
92-003021
Donaldson, E. M.
92-002458
92-002625
Donaldson, Edward M.
92-002737
Donoso, T.
92-003165
Dopazo, C. P.
92-003198
Dorin, D.
92-002616
Dorofeyeva, Ye. A.
92-002341
Dorson, Michel
92-003199
dos Reis, Sergio F.
92-002348
Dos Santos, Jose S.
92-002784
Dosanjh, Bakhshish S.
92-002219
Doudet, Thierry
92-002114
Douglas, Michael E.
92-002697
92-003791
Douglas, R. H.
92-002456
Dove, S.
92-002457
Dowgiallo, Michael J.
92-003123
Dowling, Thomas E.
92-002697
92-002699
Down, N. E. (Ted)
92-002458
Doyle, R. W.
92-002698
Doyle, Roger W.
92-002845
Doyon, Jean-Francois
92-002954
Drapcho, Caye M.
92-002262
Drazkowski, B.
92-003483
Drenner, R. W.
92-002317
Drinan, E. M.
92-003259
Drolet, R.
92-003721
Drot, Stephane
92-002459
Drucker, E. G.
92-002787
du Preez, Hein H.
92-003374
Duarte, Carlos M.
92-002956
Dubynin, V. A.
92-003019
Dubynin, V. I.
92-002509
Ducey, James E.
92-003478
Ducey, Ronald D.
92-002073
Duerr, Eirik O.
92-002206
Duguay, S. J.
92-002460
Duhe, Timothy A.
92-002263
Duke, N. N.
92-002541
Dulos, G. J.
92-002396
Dunbrack, R. L.
92-002788
Duncan, Patricia L.
92-002181
Dungan, Christopher F.
92-003250
Dunham, R. A.
92-002688
Dunham, Rex A.
92-002136
Dunkley, D. A.
92-003776
Dunne, J. B.
92-002461
Dunson, William A.
92-003458
Duobinis-Gray, L. F.
92-003265
Duran, E.
92-003421
Dushkina, Ladda A.
92-002153
Duston, Jim
92-002065
Dutil, Jean-Denis
92-002442
Dutta, H. M.
92-002354
Dutta, Hiran M.
92-003356
Dwyer, F. James
92-003285
Dwyer, William P.
92-002264
Dyer, William G.
92-003123
92-003271
Dykova, Iva
92-003182
Dyubin, V. P.
92-002462
Dzhekova-Stojkova, A. S.
92-002507

Eagan, D.
92-002103
Eales, J. G.
92-002632
92-002633
Earnheart, Robert Winston
92-002115
Easton, Robert S.
92-002976
Eaton, B. T.
92-003203
Eaton, W. D.
92-003200
Ebanks, Gina C.
92-002166
Echelle, Anthony A.
92-002699
92-002700
Eckmann, Reiner
92-002895
92-003040
Economidis, P.
92-003041
Economon, Philip P.
92-003207
Edge, Thomas A.
92-002701
Edmonds, J. S.
92-003536
Edmonds, Les
92-002789
Edwards, Gary
92-002043
Eelkema, Francis A.
92-002646
Egginton, S.
92-002657
Ehrhardt, Nelson M.
92-003722
Eikebrokk, Bjornar
92-002265
Eilertson, C. D.
92-002463
Eiras, J. C.
92-003177
Ekstrand, Bo
92-003750
Ekstrom, Peter
92-002342
92-002353
El Gamal, A. A.
92-002977
El Hraiki, A.
92-003357
El Kazzaz, Tawfik I.
92-002163
El Naggar, Gamal O.
92-002464
El-Faer, M. Zamil
92-003275
El-Matbouli, M.
92-003178
Eldon, G. A. (Tony)
92-003094
Eldon, Tony
92-003227
Elliott, Diane G.
92-003156
Ellis, A. E.
92-002449
92-003146
Ellis, Anthony E.
92-003160
Ellisman, M. H.
92-002669
Elner, Robert W.
92-002843
Elvira, Benigno
92-003048
Emel'yanova, N. G.
92-002343
Engel, C. E.
92-002095
Enger, O.
92-003137
Engevik, Rune
92-002508
English, Tara
92-002284
Enright, Catherine T.
92-002037
Enriquez S., R.
92-002061
Epifanio, C. E.
92-002979
92-002980
Erickson, David A.
92-003358
92-003428
Erickson, P. E.
92-003290
Eriksson, A.
92-003127
Ersbak, Kenneth
92-003480
Estay, Francisco
92-002925
Estay, Francisco Javier
92-002465
Estepa, A.
92-003201
Esterby, Sylvia R.
92-003386
Etnier, David A.
92-003106
European Inland Fisheries Advisory Commission
92-002869
92-003517
Evans, Barbara I.
92-002833
Evans, David O.
92-003537
Evans, M.
92-002103
Evans, P. G. H.
92-003568
Evans, S. J.
92-003301
Evelyn, T. P. T.
92-003153
Everett, Jon
92-002823
Evers, D.
92-003055
Evlanov, I. A.
92-003228
Ewan, E. Pauline
92-003162
Ewing, Michael S.
92-003479
Ewing, S. A.
92-003172
Exley, Christopher
92-003359
Fabacher, David L.
92-003372
Fabbri, Elena
92-002489
Faber, Joseph E.
92-002702

Fabrizio, Mary C.
92-003284
Facemire, Charles F.
92-002710
Fair, Patricia A.
92-002182
Fairchild, James F.
92-003285
Faivre, B.
92-003150
Falcon, Jesus M.
92-003076
Falk-Petersen, Inger-Britt
92-003330
Fancey, L. L.
92-003293
FAO of the UN
92-002038
Farina, M. D.
92-003524
Farmanfarmaian, A.
92-002627
Farrell, A. P.
92-002466
Fast, Arlo W.
92-002266
92-002295
Fauconneau, B.
92-002467
Fausch, Kurt D.
92-002978
92-003655
Fauvel, C.
92-002629
Fedorov, V. V.
92-002344
Feist, S. W.
92-003174
92-003229
Ferguson, Moira M.
92-002703
92-002736
Fermin, Armando C.
92-002183
Fernando, C. H.
92-003538
Ferreira, Johannes T.
92-002762
Ferrington, Leonard C., Jr.
92-003690
Fiegel, Donald H.
92-002734
Field, J. G.
92-003743
Field, John G.
92-003773
Figueroa, Jaime
92-002650
Figueroa, L.
92-003115
Findeis, E. K.
92-002345
Fink, Rachel D.
92-002391
Fischer-Scherl, T.
92-003158
Fishelson, L.
92-002346
Fishery Committee for the Eastern Central Atlantic
92-003723
FitzGerald, Gerard J.
92-002753
92-002790
92-002791
Fitzgerald, J. P.
92-002468
Fivelstad, Sveinung
92-002074
92-002255
92-002267
Flagg, L. N.
92-003459
Flajshans, Martin
92-002735
Fletcher, G. L.
92-002695
Fletcher, Jerald
92-003312
Flickinger, Stephen A.
92-002142
Flik, G.
92-002491
Flimlin, G. E., Jr.
92-002039
Flogstad, Harald
92-003286
Fluharty, David L.
92-003736
Fogarty, Michael J.
92-003500
Foin, Theodore C.
92-003678
92-003679
Folkvord, Arild
92-002780
Foltz, Jeffrey W.
92-002975
Fontaine, Thomas D.
92-003627
Foote, Kenneth G.
92-003768
Forbes, S. H.
92-002704
92-002705
Ford, Richard F.
92-003546
Formicki, Krzysztof
92-002268
Forneris, G.
92-002685
92-002752
92-003287
Forneris, Gilberto
92-002324
92-003769
Fornzler, Dorothee
92-002706
Forsberg, James A.
92-002116
Forseth, T.
92-003288
Forsman, Leena
92-003581
Forster, Ian
92-002219
Forteath, G. N. R.
92-002075
Forteath, N.
92-002269
Fortier, L.
92-003721
Fossato, Valentino U.
92-003408
Foster, G. N.
92-003628
Fowler, B. R.
92-003290
Fowler, L. G.
92-002270

Fox, D. E.
92-003659
Fram, Mitch
92-002193
Frame, George
92-003372
Francis, Richard C.
92-002469
Frank-Landman, Aafje
92-002815
Frank, Kenneth T.
92-003311
Frankenberger, W. T., Jr.
92-003436
Frankiewicz, P.
92-003686
Fraser, C. O.
92-003221
92-003309
Fraser, Douglas F.
92-002792
Fraser, S. P.
92-002455
Freeman, H. C.
92-003451
Freestone, David
92-003724
Frerichs, G. N.
92-003134
Friars, G. W.
92-002076
92-002499
Friedheim, Robert L.
92-003725
Friedman, David L.
92-002470
Friedmann, B. R.
92-002271
Friesen, Henry G.
92-002371
Fripp, P. J.
92-002647
Frith, H. R.
92-002793
Frithsen, Jeffrey B.
92-002315
Fritzsch, B.
92-002329
From, Jon I.
92-002471
Fry, Brian
92-003340
92-003637
Fryer, J. L.
92-003172
Fujio, Yoshihisa
92-002741
Fujioka, Yasuhiro
92-002472
Fujita, Shinji
92-002272
Fukahori, Kazuo
92-002272
Fukuda, Hideo
92-003212
Fukunaga, Kenji
92-003360
Fulcher, Kerry D.
92-002640
Fumihito, Ayanomiya
92-002355
Furan, Paul Rodney
92-002955
Furukawa, Kiyoshi
92-002794

...CONTINUED...
Furukawa, Kiyoshi
92-002865
Furukawa, T.
92-002661
Fushiki, Shozo
92-002472
Futey, Lidia M.
92-002347
Fuying, Zhang C.
92-003274
Fynn-Aikins, Franklyn Kofi
92-002473
Fyodorov, S. P.
92-002715
Gabbott, Mark
92-002101
Gabr, Samia A.
92-003425
Gabring, S.
92-003368
Gabrion, C.
92-003258
Gadomski, Dena M.
92-003022
Gagen, Charles J.
92-003278
Gaggiotti, Oscar E.
92-003012
Gagne, Francois
92-003361
Gago, F. Javier
92-003050
Gajardo, Gonzalo M.
92-002707
Galetti, Pedro M., Jr.
92-002686
Galgani, Francois
92-003338
Gall, G. A. E.
92-002077
92-002078
Gall, Graham A. E.
92-002891
Gall, Ken L.
92-003763
Gallagher, Evan P.
92-003362
Gallagher, M. L.
92-002474
Gallardo, M. A.
92-002475
Galvez-Hidalgo, N.
92-002187
Gamble, J. C.
92-003329
Gamboa, David Aurioles
92-003023
Gamperl, A. Kurt
92-002476
Gandolfi, Gilberto
92-003095
Gannon, A. T.
92-002477
Garavello, Julio C.
92-002348
Garcia-Arteaga, Juan P.
92-002867
Garcia-Cagide, Alida
92-002867
Garcia-Vazquez, E.
92-002708
Garcia, L. Ma. B.
92-002478
Garfield, Newell
92-002311

Garric, Jeanne
92-003443
Garrido, Orlando H.
92-002870
Gatlin, D. M.
92-003170
Gatlin, Delbert M.
92-002176
92-002199
Gatlin, Delbert M. III
92-002609
92-003161
Gaudin, Philippe
92-002778
Gebauer, M. T.
92-003165
Gebhardt, Harald
92-003429
Geiger, James G.
92-002727
Gelman, A.
92-002479
Gendusa, Tony C.
92-003363
Gensemer, Robert W
92-003417
Gershanovich, A. D.
92-002184
Gerundo, N.
92-003229
Ghan, David
92-003629
Ghazaly, K. S.
92-003364
92-003365
Ghilarov, Alexej M.
92-002308
Ghosh, A. R.
92-003366
Giaccone, V.
92-003287
92-003755
92-003756
92-003757
Gibb, A. C.
92-002795
Gibbs, Robert
92-002911
Gibson, Michael D.
92-002734
Gibson, Robin N.
92-002987
Giddings, Jeffrey M.
92-003690
Giesy, John P.
92-003274
Gil De Pertierra, Alicia
92-003252
Gilbert, M.
92-003721
Giles, M. A.
92-002709
Giles, Nick
92-002805
Gilhousen, Philip
92-003501
Gilkes, P. W.
92-003695
Gill, A. B.
92-002982
Gill, Duane A.
92-003720
Gill, Tejendra S.
92-003367
Gillespie, Robert B.
92-002710
Ginatulina, L. K.
92-002711
Giovannini, Philip
92-002290
Gipson, Robert D.
92-003024
Gjedrem, Trygve
92-002712
Glamann, J.
92-003222
Glazier, Donald J.
92-003014
Glubokov, Alexander I.
92-002480
Glynn, A. Wicklund
92-003368
Glynn, Anders Wicklund
92-003337
Gochfeld, Deborah J.
92-002796
Godcharles, Mark F.
92-003086
Godin, Jean-Guy J.
92-002827
Godwin, John R.
92-002797
Goicoechea, Oscar
92-002650
Goksoyr, Anders
92-002481
Golani, D.
92-003051
Golbs, Siegfried
92-002218
Gold, John R.
92-002733
92-002734
Goldberg, Yacob
92-002143
Goldschmidt, Alfred
92-003470
Golovan, G. A.
92-002349
Golow, A. A.
92-003369
Gomahr, Andreas
92-002350
Gomez, L.
92-003421
Goncalves, Emanuel J.
92-002774
92-002775
Gong, Yeong
92-002713
Gonzales-Villasenor, L. I.
92-002688
Gonzalez Ramirez, Pedro G.
92-003037
Gonzalez, Laura
92-003114
Gonzalez, Richard J.
92-002482
Gonzalez, Rosana
92-003151
Goodman, Larry R.
92-003370
Goodman, Randell K.
92-002234
Goodman, Sarah Anne
92-002042
Gopal, K.
92-003427
Gophen, M.
92-003630
Gordoa, Ana
92-002956

Gordon, J. D. M.
92-003052
Goreau, S.
92-002154
Goreau, T. J.
92-002154
Gorge, G.
92-003453
Gorge, Gerhard
92-003371
Gorshkov, Sergey A.
92-002714
Gorshkova, Galina V.
92-002714
Goshorn, D. M.
92-002979
92-002980
Goslow, G.
92-002799
Gots, Barra L.
92-003666
Gouveia, Antonio J. R.
92-002079
Govind, B. V.
92-002117
Goyal, Sagar M.
92-003207
Goyard, Emmanuel
92-002155
Grachev, M. A.
92-002715
Grady, Andrew W.
92-003372
Graham, C. R., Jr.
92-002545
Graham, J. B.
92-002453
92-002483
Graham, K. J.
92-002923
Graham, Thomas
92-003762
Granado-Lorencio, Carlos
92-003696
Grande, L.
92-002327
92-002716
Grande, Magne
92-002484
Grant, W. E.
92-003615
Gras, N.
92-003352
Grass, Alan F.
92-002080
92-002957
Grau, E. G.
92-002506
Grau, E. Gordon
92-002599
92-002653
Graves, Victor
92-002205
Gravois, M. G.
92-003179
Grawinski, Edward
92-003121
Green, Bartholomew
92-002147
Green, Bartholomew W.
92-002185
92-002273
92-002274
Green, K.
92-003079
Green, Trellis G.
92-003502
Greene, Lawrence E.
92-003373
Gregg, Barbara R.
92-003506
Grewe, Peter Martin
92-002717
Grier, H. J.
92-002926
Grier, Harry J.
92-002579
Griffin, B. R.
92-002040
92-003135
Griffin, Mark E.
92-002177
92-002186
Griffin, W.
92-002164
Griffin, Wade
92-003510
Griffith, Jack
92-002798
Grillner, Sten
92-002335
Grimm, Marten Pieter
92-003687
Grisez, L.
92-003230
Gritsoni, P.
92-002516
Grizzle, John M.
92-003334
Grobecker, David B.
92-003061
Grobler-van Heerden, Eurika
92-003374
Grobler, Eurika
92-002275
Groome, D.
92-003651
Gros, Philippe
92-003613
Grost, Richard T.
92-002927
Grove, David J.
92-002485
92-002486
Grover, Donald A.
92-002351
Grover, Jill J.
92-002981
Gruber, Samuel H.
92-003525
Guarda, F.
92-003242
Guerrero, Carlos A.
92-003021
Guillot, F.
92-002912
Guimaraes, Carlos T.
92-002784
Gunkel, G.
92-003308
Gunset, Mary
92-003215
Gunter, E. Royce, Jr.
92-003539
Gunther, J.
92-002187
Gupta, T. R. C.
92-002048
Gusev, G. P.
92-002487

Gushchin, A. V.
92-002322
Gustaveson, A. Wayne
92-002488
Gustiano, Rudhy
92-002670
Gutierrez, Joaquim
92-002489
92-002490
Guttman, Sheldon I.
92-002710
Guy, Christopher S.
92-003631
Guyomard, R.
92-002689
92-002760
Gyano, A.
92-003328
Gyano, Antal
92-002041
Haas, Gordon R.
92-003096
Haase, Bruce L.
92-003509
Haenen, O. L. M.
92-003230
Hafner, H.
92-002687
Haig, A. J. N.
92-002054
Hair, C. A.
92-003731
Haire, Michael
92-003704
Hairston, Nelson G., Jr.
92-002859
Hakanson, Lars
92-003289
Haldorson, L.
92-003000
Haldorson, Lewis
92-002928
Hales, L. S., Jr.
92-003025
Haley, M.
92-003055
Hall, B. K.
92-002374
92-002986
Hall, D. L.
92-003026
Hall, Jane R.
92-003277
Hallard, K. A.
92-003659
Hallerman, Eric M.
92-003544
Halpin, P. M.
92-002799
Halsinaho, Sari
92-002846
Hamackova, Jitka
92-002480
Hamazaki, Tatsuo S.
92-002664
Hamill, John
92-003800
Hammermeister, Dean E.
92-003398
Hammers, Brad E.
92-003027
Hampton, John
92-003594
92-003595
Hanchet, Stuart
92-003518

...CONTINUED...
Hanchet, Stuart
92-003540
Handy, R. D.
92-003375
92-003376
Haney, D. C.
92-003202
Hanfman, Deborah
92-002055
Hankins, Joseph A.
92-002189
92-002277
Hanscom, Thomas
92-003559
Hansen, G. H.
92-002574
Hansen, Michael J.
92-003512
Hansen, T.
92-002635
Hansen, Tom
92-002081
92-002104
Hanson, T. R.
92-002276
Hanssen, R. G. J. M.
92-002491
Hanyu, Isao
92-002794
Hara, Takeshi
92-003205
92-003206
Harada, Katsuhiko
92-003569
Harding, G. C.
92-003290
Hardman, K. R.
92-003416
Hardy, Ron W.
92-002219
Hargrave, B. T.
92-003290
Hargreaves, John A.
92-002293
Harmon, J. S.
92-002492
92-002611
Harmon, Jamie S.
92-002493
Harosi, F. I.
92-002614
Harper, A. A.
92-002652
Harrell, M. L.
92-002474
Harrell, R. M.
92-002718
Harrell, Reginal M.
92-002224
92-002225
92-002727
Harrison, Ian J.
92-002352
Harrison, L. R.
92-003176
92-003189
Harroun, Leslie
92-003796
Harsanyi, Alexander
92-003570
Harshbarger, Thomas J.
92-003053
Hart, N. H.
92-002494
Hart, P. J. B.
92-002982

Hartley, S. E.
92-002719
Hartmann, Jurgen
92-002929
Hartvich, Petr
92-003632
Hartzler, James R.
92-003480
Harvey, B. R.
92-003291
Harvey, Catherine M.
92-002544
Hasegawa, Seizo
92-002958
Hasegawa, Yoshihisa
92-002407
Hassler, Thomas J.
92-003310
Hastein, Tore
92-003148
Hastings, T. S.
92-003125
Hatch, Lu.
92-002276
Haux, Carl
92-002104
Haverly, J. E.
92-002495
Hawkings, W. E.
92-003446
Hawkins, W. E.
92-003377
Hayashi, Moritaka
92-003726
Haygood, Margo G.
92-002496
Hayman, Milli
92-003454
Hayward, Robert S.
92-002983
Hazon, Neil
92-002444
Head, William D.
92-002149
Heagler, Mary Gay
92-002720
Heath, Alan G.
92-003378
Heath, Ralph G.
92-002082
Hebert, Paul D. N.
92-002681
Hecht, Thomas
92-002188
Heckmann, Richard A.
92-003214
Hecky, R. E.
92-003553
Hedrick, M. S.
92-002497
Hedrick, R. P.
92-003200
Hedtke, Steven F.
92-003380
Heggenes, Jan
92-003658
Heigenhauser, G. J. F.
92-002604
Heiligenberg, Walter
92-002520
Heine, C.
92-002800
Heinen, John M.
92-002189
92-002277
Heinis, Larry J.
92-003292
Heinze, Wolfgang
92-003116
Heiser, J. B.
92-002903
92-003749
Held, James A.
92-002125
Hellou, J.
92-003293
Helminen, Harri
92-002846
Hemmer, M. J.
92-002160
Hemmer, Michael J.
92-002936
92-003370
92-003379
Hemre, Gro-Ingunn
92-002628
Henderson, R. James
92-002498
Hendrickson, Dean A.
92-003541
Hengstberger, S.
92-003203
Henriques, D.
92-002984
Henry, M. S.
92-003416
Henry, R. P.
92-002643
Herbinger, C. M.
92-002499
Herbinson, Kevin T.
92-002888
Herman, Roger L.
92-002533
Hermanutz, Roger O.
92-003380
Hermens, Joop
92-003351
92-003381
Hermens, Joop L. M.
92-003353
92-003354
92-003441
Hernandez-Vazquez, Sergio
92-002933
Herring, Peter J.
92-002496
92-002500
Herrmann, David P.
92-003770
Hershberger, William K.
92-002721
92-002740
Herslof, Bengt G.
92-003750
Herzig-Straschil, Barbara
92-003788
Hess, Helen C.
92-002585
Hesse, Larry W.
92-003279
Hesslein, R. H.
92-003659
Heum, M.
92-003164
Hew, C. L.
92-002695
Hew, Choy L.
92-002660
Hickie, B. E.
92-003440

Hidaka, Iwao
92-002526
Hieu, Le Huu
92-003435
Higgs, Dave A.
92-002219
Hilborn, Ray
92-003542
Hill, Jeffrey P.
92-003771
Hill, Loren G.
92-003057
Hinch, Scott G.
92-002801
Hinshaw, Jeffrey M.
92-003136
Hinton, David E.
92-003399
Hirano, Tetsuya
92-002561
Hirata, Hachiro
92-002167
Hirono, Ikuo
92-002769
Hirvonen, Arto
92-002846
Hislop, J. R. G.
92-002985
Hjeltnes, B.
92-003209
Hlavova, V.
92-002501
Hlohowskyj, Ihor
92-003382
Hobbie, John
92-003340
Hochleithner, Martin
92-002118
Hochwald, S.
92-003219
Hodson, Ronald G.
92-002510
92-002524
92-002626
92-002634
Hoese, D. F.
92-003765
Hoese, Douglass F.
92-003097
Hofer, Rudolf
92-002871
Hoff, Michael H.
92-003512
Hoff, Thomas Barry
92-003080
Hoffman, Katherine
92-002198
92-002551
Hoffmann, R. W.
92-003158
92-003178
Hogans, William E.
92-003249
Hoglund, Marilynn D.
92-003398
Hoke, Robert A.
92-003274
Hokfelt, Tomas
92-002335
Holbrook, Sally J.
92-002802
Holcik, Juraj
92-003543
Holden, Paul B.
92-003519
Holl, M.
92-003522
Holland, L. Z.
92-002722
Holland, N. D.
92-002722
Holland, Richard S.
92-003030
Holliman, A.
92-003134
Holloway, Garth
92-003312
Holmgren, Susanne
92-002485
92-002486
Holopainen, I. J.
92-003010
92-003688
Holopainen, Ismo J.
92-003001
Holst, Sabine
92-003245
Holt, G. J.
92-002441
Holt, Richard A.
92-003250
Home, H.
92-002502
Honda, Haruo
92-002156
92-002157
Honda, Ryo
92-003212
Hong, Chia-Swee
92-003294
Hongslo, T.
92-003142
Honkanen, Tapio
92-002353
Honma, Y.
92-002722
Hontela, Alice
92-003383
Hooe, Michael L.
92-003633
92-003689
Hoogenboezem, Wim
92-002395
92-003596
Hook, John H.
92-003727
Hooper, R.
92-003390
Hooper, W. C.
92-003460
Hoose, Karl V.
92-002278
Hoover, Jan Jeffrey
92-003677
Hopkins, C. L.
92-002503
Hopkins, Kevin
92-003571
Hopkinson, Charles S., Jr.
92-003623
Hopky, G. H.
92-003612
Hopky, Glen E.
92-003588
Horikawa, Yoshiaki
92-002567
Horimoto, Katsuhisa
92-002504
Horiuchi, M.
92-003166

Hornsby, A. G.
92-003448
Horppila, J.
92-003641
Horwitz, J.
92-002457
Hoshiai, G.
92-003166
Hossain, A. M.
92-002354
Hostetler, S. W.
92-003481
Houdebine, L. M.
92-002689
Houlihan, D. F.
92-002434
92-002552
Houston, Arthur H.
92-002505
Houvet, D.
92-003339
Howe, Jeffrey C.
92-002803
92-003078
Howerton, R. D.
92-002506
Howes, G. J.
92-002355
Howes, Gordon J.
92-002352
Howick, Gregory L.
92-003690
Hristovski, D. N.
92-002507
Hsieh, Janet
92-003246
Hu, Hung-Jen
92-002258
92-002436
Hubbs, Clark
92-003462
Huber, Robert
92-002356
Hubert, Wayne A.
92-002927
92-003024
92-003664
Hudon, Christiane
92-002954
Hudy, Mark
92-002896
Huggett, Robert J.
92-003295
Hughes, G. M.
92-002359
Hughes, R. M.
92-003670
Hughes, Roger N.
92-002987
Hugie, Don M.
92-002804
Huner, Jay V.
92-002279
Hung, Yung-Tse
92-003661
Hunn, Joseph B.
92-003346
Hunt von Herbing, I.
92-002915
92-002930
92-002986
Hunt, R. V.
92-003451
Hunt, Robert L.
92-003513

...CONTINUED...
Hunt, Robert L.
92-003660
Hunte, W.
92-002916
92-002930
Hunter, John R.
92-002780
Huntingford, Felicity
92-002805
Huntingford, Felicity A.
92-002792
Hursh, D. A.
92-003202
Husby, David M.
92-002311
Husevag, B.
92-003137
Hustveit, Helge
92-002508
Hutcheson, M. R.
92-003296
Hutchins, J. B.
92-003054
Huysseune, A.
92-002374
Hwang, Yun Ha
92-002523
Hyatt, A. D.
92-003203
Hynes, Julian D.
92-002703
Iannacone, Jose
92-003241
Ibbett, R. D.
92-003291
Igler, Kurt
92-002083
Igumnova, L. V.
92-002509
Ihssen, P. E.
92-003085
Ihssen, Peter E.
92-002703
Iida, Takaji
92-003138
Ikeya, Fumio
92-003205
92-003206
Ilyinsky, V. V.
92-003297
Inada, Yoshikazu
92-002806
Ingemansson, Torbjorn
92-003750
Ingersoll, Christopher G.
92-003346
Ingham, P. W.
92-002757
Inglis, V.
92-003139
92-003204
Inouye, Kiyoshi
92-003205
92-003206
International Council for the Exploration of the Sea
92-003298
International Pacific Halibut Commission
92-003473
Ip, Y. K.
92-003344
Irlandi, Elizabeth A.
92-003705
Irvine, James R.
92-002959

Irwin, Elise
92-003454
Isaev, N. A.
92-003728
Ishida, Noriko
92-003140
Ishimatsu, Atsushi
92-003384
Issvoran, Gerard
92-003133
Iturra, Patricia
92-002764
Itzkowitz, M.
92-002807
92-003055
Iuchi, Ichiro
92-002566
92-002664
Ivanenkov, V. V.
92-002723
Iwama, George K.
92-002560
Iwamoto, Tomio
92-003098
Iyengar, A.
92-002748
Izumiyama, Masafumi
92-003138
Jackson, Leslie F.
92-002510
Jacobs, James J.
92-003700
Jacobsen, Richard E.
92-003484
Jahn, Larry A.
92-003672
Jaiyen, K.
92-002129
Jaksic, S.
92-003141
Jalabert, B.
92-002732
James, A. G.
92-003743
James, Andrew G.
92-003773
James, P. S.
92-002543
Jamet, J. L.
92-003646
Jamu, Daniel M.
92-002119
Jansen, Maura
92-003249
Jansen, W. A.
92-002511
Jansson, E.
92-003142
Jarvik, Ahto
92-003582
Javalgi, Ashok G.
92-003661
Javier Estay, Francisco
92-002764
Jaw, Ching-Guang
92-003447
Jayaram, Muthanna G.
92-002512
Jayne, B. C.
92-002795
92-002808
Jellyman, Don
92-002872
92-003028
Jenkins, J. A.
92-002513
Jenkins, Wallace E.
92-002120
Jennings, Michael D.
92-003662
Jennings, S.
92-002897
Jensen, A.
92-003385
Jensen, A. J.
92-003231
Jensen, A. L.
92-003081
92-003597
Jensen, Buddy Lee
92-003789
92-003790
Jensen, F. B.
92-002568
Jensen, Gary
92-002055
92-002056
Jensen, John W.
92-003598
Jessop, B. M.
92-003503
Jhingran, Arun G.
92-003108
Jimenez, Braulio
92-003414
Jin, Kang-Ren
92-003599
Jior, R. S.
92-003317
Jo, Tae Hyun
92-003572
Jobin, Richard M.
92-002514
Jobling, M.
92-002809
Jobling, Malcolm
92-002337
92-002440
Johannessen, P. J.
92-003137
Johansen, J. A.
92-002466
John, T. M.
92-002414
Johnsen, B. O.
92-003231
Johnsen, Helge Kreutzer
92-002440
Johnson, Alan M.
92-002724
Johnson, David E.
92-003410
Johnson, David L.
92-002963
Johnson, Eric
92-003468
Johnson, G. David
92-002357
Johnson, James E.
92-003789
92-003790
Johnson, M. S.
92-003301
Johnson, Michael R.
92-003143
Johnson, Rodney D.
92-003274
Johnson, Steven R.
92-002121
Johnsson, Jorgen I.
92-003029

Johnston, Carol Eileen
92-002358
Johnston, N. Thomas
92-002959
Johnston, Warren E.
92-002088
Johnstone, A. D. F.
92-003523
Joll, L.
92-003082
Jolly, Curtis M.
92-002280
Jonasson, P. M.
92-002993
Jones, John
92-002065
Jones, John D.
92-002219
Jones, K.
92-003082
Jones, M. N.
92-003415
Jones, Paul D.
92-003274
Jones, Ronald D.
92-003504
Jones, Simon R. M.
92-003180
Jones, W.
92-003427
Jonsson, B.
92-002993
92-003288
Jorgensen, E. H.
92-002809
Joss, Jean M. P.
92-002724
Jowett, Ian
92-003729
Joyeux, J.-C.
92-002873
Juell, Jon-Erik
92-002281
Julini, M.
92-003253
Jumper, George Y., Jr.
92-003600
Jungalwalla, P. J.
92-002084
Jurajda, P.
92-002501
Jurgens, O.
92-003131
Jurvelius, Juha
92-003056
Kabus, M. J.
92-002085
Kaiser, G. Ellen
92-002282
Kaiser, Horst
92-002191
Kaiser, Klaus L. E.
92-003386
Kaiser, M. J.
92-002810
Kaiser, Michel J.
92-002987
Kakuta, I.
92-003387
Kallio-Nyberg, Irma
92-003634
92-003663
Kalsch, W.
92-003453
Kaminski, Michael T.
92-003030
Kamrin, Michael A.
92-003761
Kamshilin, I. N.
92-002723
Kanda, Naohisa
92-002741
Kandaswami, Chithan
92-003433
Kane, Donald A.
92-002515
Kangas, P. C.
92-003772
Kanno, Tsuyoshi
92-003208
Kanoh, Satoshi
92-003753
Kaplan, Eugene H.
92-002283
Kapuscinski, Anne R.
92-003544
Karamanos, N. K.
92-002516
Karara, Adel H.
92-003388
Karas, Peter
92-003316
Karaseva, E. M.
92-002898
Kari, Ruohonen
92-002222
Karpagaganapathy, P. R.
92-003434
Karpenko, V. I.
92-003099
Kartavtsev, Y. P.
92-002725
Kartavtsev, Yu. F.
92-002726
Karunasagar, I.
92-002131
Karunasagar, Iddya
92-003747
Karunasagar, Indrani
92-003747
Kasa, P.
92-003435
Kaseloo, P. A.
92-003524
Kasprzak, Rick
92-002868
Kasumyan, A. O.
92-002811
Kato, Kazunori
92-002946
Katoh, Takashi
92-002472
Katow, Shigetaka
92-002664
Katz, S. L.
92-002497
Katzir, Gadi
92-002991
Kaufman, Les
92-003545
Kaufmann, Ruediger
92-002812
Kaushik, S. J.
92-002467
Kaushik, Sadasivan J.
92-002575
Kautter, D. A.
92-003760
Kauttu, Ari
92-003581
Kauttu, Jaana
92-003581

Kavamoto, E. T.
92-002587
Kawahara, Eijiro
92-003144
92-003145
Kawai, Yuji
92-002517
Kawashima, Seiichiro
92-002407
Kawatsu, Hiroshi
92-002518
Kaya, Calvin M.
92-002122
Kayes, T. B.
92-002085
Kayes, Terrence B.
92-002190
92-002415
Kearn, G. C.
92-003270
Kearn, Graham C.
92-003232
Keckeis, Hubert
92-002519
Keizer, Johannes
92-003389
Keller, Aimee A.
92-002315
Keller, Clifford H.
92-002520
Kelley, Chris D.
92-002163
Kelley, Christopher D.
92-002542
Kellner, Ronald G.
92-002521
Kelso, William E.
92-003674
92-003675
Kendall, Arthur W., Jr.
92-002882
Kennedy, C. R.
92-003247
Kennedy, D. G.
92-003244
Kennedy, John O. S.
92-003601
Kennedy, S.
92-003244
Kent, Donald B.
92-003546
Kent, Michael L.
92-003195
Kerby, J. Howard
92-002727
Kerr, Steven J.
92-003635
Keshavanath, P.
92-002131
Kesler, David H.
92-002813
Kessabi, M.
92-003357
Kestemont, Par P.
92-002522
Kettle, W. Dean
92-003690
Khan, R. A.
92-003233
92-003390
Kharchenko, V. V.
92-002715
Kholodilov, N. G.
92-002715
Khoo, H. E.
92-002588
Khuda-Bukhsh, A. R.
92-002747
Kiiskila, Matti
92-002846
Kikuchi, Kohtaroh
92-002156
92-002157
Killam, Kristi A.
92-002836
Killcreas, Wallace E.
92-002284
Kilpatrick, J. S.
92-002216
Kim, Bong
92-002158
92-002206
Kim, Kyu-Il
92-002190
Kim, Soon Song
92-002713
Kim, Suhn Hee
92-002523
Kim, Sung Zoo
92-002523
Kimler, V. A.
92-003772
Kimura, Seiro
92-002945
Kindschi, Greg A.
92-002086
92-002087
King, Bruce E.
92-002899
92-002900
King, T. L.
92-003059
King, William V
92-002524
Kinney, Todd A.
92-002931
Kirchgessner, M.
92-002606
Kirillov, A. F.
92-002320
Kirk, Kiaran
92-002525
Kirk, R. S.
92-003234
Kirking, S. C.
92-003475
Kirpichnikov, V. S.
92-002728
Kiseleva, S. G.
92-002462
Kisia, S. M.
92-002359
Kislyakov, V. P.
92-003099
Kitamura, S.
92-002729
Kittel, C. J.
92-002162
Kiyashko, S. I.
92-003636
Kiyohara, Sadao
92-002526
Kiyono, Michiyasu
92-002156
92-002157
Kla, Joanne M.
92-002057
Klaoudatos, Spiros
92-002223
Klassen, Greg
92-003235

Klaverkamp, J. F.
92-003451
Klein, W.
92-003409
Kling, George W.
92-003637
Klinkhardt, Manfred B.
92-002730
Klontz, George W.
92-002191
Klussmann, Wallace G.
92-003083
Kneib, R. T.
92-002314
92-003031
Knight, Jeremy G.
92-002874
Knox, C. J.
92-002527
Knud-Hansen, C. F.
92-002123
92-002129
Knuth, Barbara A.
92-003761
Knuth, Michael L.
92-003292
Knyazev, I. V.
92-003602
Ko, Unchu
92-003442
Kobayashi, M.
92-003173
Kobayashi, Masanori
92-003157
Kobayashi, W.
92-002662
Koby, Robert F., Jr.
92-002086
92-002087
Koch, Franz
92-002528
Kohler, C. C.
92-002988
Kohler, Christopher C.
92-002134
92-002213
92-003043
Kohler, S.
92-002988
Koho, J.
92-002886
Koike, Atsushi
92-003573
Kokkala, I.
92-002529
Koksvik, J. I.
92-003638
Koljonen, Marja-Liisa
92-003634
92-003663
Kolokolnikova, S. E.
92-003228
Konagaya, Shiro
92-002663
Konchina, Yu. V.
92-002989
Konikoff, Mark
92-002868
Konoval, G.
92-002192
Konstantinov, A. S.
92-002530
Kormanik, G. A.
92-002531
Kornfield, Irv
92-002755

...CONTINUED...
Kornfield, Irv
92-002823
Korolev, V. V.
92-002875
Koronelli, T. V.
92-003297
Korostelyov, S. G.
92-002570
Korovina, V. M.
92-002360
Korsmeyer, K. E.
92-002532
Korstad, John
92-002193
Kosaki, Randall
92-002814
Koskela, Juha
92-002618
Kotlyar, A. N.
92-002361
Kotrschal, Kurt
92-002350
92-002362
92-003470
Kottelat, Maurice
92-003100
Koulikov, A. O.
92-003299
Kouril, Jan
92-002480
Kovalevskaya, N. V.
92-003742
Kozel, Steven J.
92-003664
Kramer, Sharon Hendrix
92-002876
Kramer, Vincent J.
92-003391
Krauskopf, Manuel
92-002650
Kreis, Russell G., Jr.
92-003274
Krejsa, R. J.
92-002363
Krise, William F.
92-002533
Kristjansson, Magnus M.
92-002534
Kristoffersen, Roar
92-003236
Kritscher, Erich
92-003237
92-003238
92-003239
Kritsky, D. C.
92-003240
Kritsky, Delane C.
92-003267
Krogdahl, Ashild
92-002170
92-002204
92-002990
Krogsrud, J. K.
92-003209
Krome, Elizabeth C.
92-003704
Krueger, C. C.
92-003547
Krueger, William H.
92-002321
Kruize, R. R.
92-003300
Krumschnabel, Gerhard
92-002656
Kruse, H.
92-003396

Kublik, E. A.
92-003718
Kufner, Regina
92-003330
Kuhn, Eduard R.
92-002433
Kuhnlein, Urs
92-002753
Kuittinen, Eero
92-002937
Kusakabe, Y.
92-002062
Kushnirov, David
92-002285
Kusuda, Riichi
92-002744
92-003145
Kuwaye, Todd T.
92-002535
Kuz'min, Ye. V.
92-002536
Kuz'mina, V. V.
92-002537
Kuz'mina, Ye. G.
92-002537
Kvasnicka, Pavel
92-002735
La Point, Thomas W.
92-003281
92-003285
Labbe, C.
92-002538
Labbe, Jean-Pierre
92-002410
Labinger, Zev
92-002991
Labonne, David
92-002248
Ladu, B. M. B.
92-002539
92-002540
Lafaurie, Marc
92-003392
92-003394
92-003395
Lahav, E.
92-002226
Lahav, Eran
92-002227
Lahti, Erkki
92-002932
Lai, N. C.
92-002483
Laib, Frank E.
92-003358
Laidig, Thomas E.
92-003032
Laine, Anne
92-003584
Lakshmanan, M. A. V.
92-002139
Lall, S. P.
92-002194
Lam, T. J.
92-002648
92-003181
92-003187
Lambert, Alain
92-002731
Lambert, J. D.
92-002754
Lambregts, J.
92-002164
Laming, Peter R.
92-002571
Lammens, Eddy H. R. R.
92-002815
92-003596
Lamproye, Alain
92-002459
Landsberg, Jan H.
92-003185
Lane, H. C.
92-002541
Langeland, A.
92-003288
Langston, Althaea
92-002042
Lannan, C. N.
92-003172
Lanno, R. P.
92-003440
Lapointe, Michael F.
92-003603
Larinier, M.
92-003585
LaRosa, S. C.
92-002776
Larsen, D. A.
92-002586
Larsen, Elena
92-003341
Larsen, Havard E.
92-002481
Larson, H. K.
92-003765
Larson, Ralph J.
92-002962
Larson, Scott C.
92-002901
Lauder, G. V.
92-002795
92-002808
Laughton, Robert
92-002960
Laurencin, F. Baudin
92-003154
Lavenberg, Robert J.
92-003050
92-003101
Lawrence, Addison L.
92-002303
Lawson, J. D.
92-003697
Lazzaro, Xavier T.
92-002309
Le Brun, Nathalie
92-002731
Leach, J. H.
92-003548
Leah, R. T.
92-003301
Leamaster, Brad
92-002197
Lean, D. R. S.
92-003276
Leaniz Caprile, Carlos Garcia de
92-002961
Lebecque, Stephane
92-002459
Leber, Kenneth M.
92-003549
Lech, John J.
92-003358
92-003428
Lecomte-Finiger, R.
92-002364
Lecomte, Frederique
92-003522
Lee, Byung Moon
92-003572

Lee, Charles J.
92-003393
Lee, Cheng-Sheng
92-002163
92-002542
Lee, E. M.
92-003390
Lee, Geum Yeong
92-002523
Lee, J. A. C.
92-002543
Lee, K.-K.
92-003146
Lee, Phillip G.
92-002286
92-002303
Leelapatra, W.
92-002625
Leewis, R. J.
92-003730
Lega, Yu. V.
92-002151
Legendre, M.
92-002732
92-002759
92-002760
Leggett, William C.
92-003311
Lehtonen, Hannu
92-003566
Lei, F. Y.
92-002877
Leibovitz, Henry E.
92-002173
92-002195
Leiffrig, Francois
92-002459
Lein, Tor Eiliv
92-003330
Lelek, A.
92-003665
Lemaire-Gony, Sylviane
92-003394
92-003395
Lemaire, Philippe
92-003394
92-003395
Leman, V. N.
92-002948
Lemmons, Roger P.
92-003057
Lenanton, R. C.
92-003082
Lenanton, R. C. J.
92-003536
Lenarz, William H.
92-002962
Leon, Gloria
92-002650
Leonard, R. B.
92-002379
Lesel, Rene
92-002439
LeTendre, Gerry C.
92-003635
Leung, T. C.
92-002365
Levanon, Dan
92-003020
Leverone, J. R.
92-003282
Lewin, C. S.
92-003125
Lewis, C. A.
92-003548
Lewis, Donald H.
92-003161
Lewis, J. W.
92-003234
Lewis, Richard J.
92-003302
Li, Menghe
92-002196
Li, Yucheng
92-002733
92-002734
Libosvarsky, Jiri
92-002816
92-003698
Lichatowich, James A.
92-003793
Liem, K. F.
92-002366
Lim, Chhorn
92-002197
92-002205
Lima, Ann
92-003477
Lin, C. M.
92-002688
Lin, H. R.
92-002639
Lin, Tain-Sheng
92-003447
Lin, Wenhui
92-002498
Lincoln Smith, M. P.
92-003731
Lincoln, Richard H.
92-003550
Lindberg, R.
92-003142
Lindeman, K. C.
92-003482
92-003732
Lindqvist, Ossi V.
92-003169
Lindsetmo, Jan Petter
92-002508
Lindstrom, Kai
92-002817
92-002841
92-003644
Ling, K. H.
92-003181
92-003187
Linhart, Otomar
92-002735
Linnenbach, Michael
92-003429
Linnon, Beth E.
92-003078
Lipnick, Robert L.
92-003410
Lisk, Donald J.
92-003763
Liskauskas, Arunas P.
92-002736
Littell, Bruce
92-003279
Little, Edward E.
92-003346
Liu, Ming-Sai
92-003751
Ljungberg, O.
92-003142
Lluch-Belda, Daniel
92-002933
Lluch-Cota, Daniel B.
92-002933

Lo, Anthony W-I.
92-002544
Lockwood, S. J.
92-002159
Lodge, Keith
92-003274
Logan, Samuel H.
92-002088
Loir, M.
92-002538
Lom, Jiri
92-003182
Lombardi, J.
92-002545
Lombarte, A.
92-002367
Lommel, A.
92-003396
Long, Edward R.
92-003303
Long, J. J.
92-003159
Long, John H., Jr.
92-002546
Long, W. L.
92-002368
Lopes, Humberto D.
92-003405
Lopez, J. M.
92-003304
Lopinot, Al
92-003117
Lorentz, Chris
92-003305
Lorio, Wendell J.
92-002124
92-003758
Lorson, Richard D.
92-003033
92-003551
Losanes, Loel P.
92-003573
Losordo, Thomas M.
92-002287
92-002301
Lotimer, J.
92-003524
Love, Milton
92-002928
Lovejoy, Stephen
92-003312
Lovell, Richard T.
92-002181
92-002196
92-002228
92-002464
Lovely, Phillip A.
92-003285
Lovett, M. B.
92-003291
Lovshin, Leonard L.
92-002234
Low, J. C.
92-002661
Lozano, Stephen J.
92-003306
Lu, John Y.
92-003759
Lubinski, K. S.
92-003483
Lucas, M. C.
92-003523
Lucena, Carlos A. S.
92-003102
Luchtenberg, Hans
92-003245
Luckett, Larry
92-003521
Luft, J. Christopher
92-002547
Luk'yanenko, V. I.
92-002412
Luk'yanenok, M. P.
92-003058
Lundh, Tore
92-003322
Lunestad, B. T.
92-003137
Luo, Jiangang
92-002934
Luo, Q. S.
92-002398
Lupiani, B.
92-003198
Luque, Jose Luis
92-003241
Lutnesky, M. M. F.
92-002818
Lutnesky, Marvin
92-003604
Lutz, Gordon
92-002597
Lyczkowski-Shultz, Joanne
92-002819
Lydersen, Espen
92-003418
Lyle, J. M.
92-002923
Lynch, John D.
92-002931
Lysack, Walter
92-003264
MacCrimmon, Hugh R.
92-003666
Maceina, Michael J.
92-003083
Macer, C. T.
92-002878
MacGregor, Carol L.
92-003720
Machiels, Marcel A. M.
92-003590
Machii, Tadanobu
92-003573
Mackay, D.
92-003400
Mackay, W. C.
92-002511
92-003624
Mackey, A. P.
92-003307
Maclean, N.
92-002748
MacNair, Neil
92-003162
MacNeill, David B.
92-003763
Macri, B.
92-003242
Madenjian, Charles P.
92-002295
Madsen, Steffen S.
92-002420
Maeda, Tatsuaki
92-002946
Magalhaes, M. F.
92-002992
Magee, Philip S.
92-003397
Magi, Barbara
92-002555

Magliulo Cepriano, L.
92-002548
Maguzzu, S.
92-003147
Maharaj, Vishwanie
92-003733
Maheshkumar, S.
92-003207
Mahon, Jeffrey
92-002820
Maire, P.
92-003522
Maisse, Gerard
92-002777
Makeyeva, A. P.
92-002343
Makinen, Timo
92-002161
Maksimenkov, V. V.
92-003713
Maksimova, Ye. G.
92-002369
Makuhina, L. I.
92-002935
Malabarba, Luiz R.
92-003102
Malatesta, R. J.
92-002776
Maler, L.
92-002669
Maler, Leonard
92-002520
92-002603
Malison, J. A.
92-002085
Malison, Jeffrey A.
92-002125
92-002415
Mallefet, J.
92-002549
Malmgren-Hansen, A.
92-003605
Malmquist, H. J.
92-002993
Malone, Ronald F.
92-002260
Mamontov, A. M.
92-003636
Mananos, E.
92-002406
Mangindaan, R. E. P.
92-003171
Mangindaan, Remy E. P.
92-003149
Mangual, Rafael
92-002193
Manire, Charles A.
92-003525
Mann, Kenneth H.
92-003491
Manohar, L.
92-003268
Manouras, A.
92-002516
Manzano, Carlos
92-002033
Maragal, M. M.
92-003752
Marchini, Silvia
92-003398
Marcinko, Martin T.
92-003033
92-003551
Margraf, F. Joseph, Jr.
92-002983
Maric, Drago
92-002370
Marion, Michel
92-003361
Markarova, I. A.
92-002902
Markevich, N. B.
92-002935
Markham, James L.
92-002963
Markiw, Maria E.
92-003183
92-003184
Marra, Luciano E.
92-002371
Marschall, Elizabeth A.
92-002847
Marsh, Paul C.
92-002697
92-003790
Marte, C. L.
92-002638
Marthaler, Roland
92-003429
Martin-Robichaud, D. J.
92-002126
92-002376
Martin, J. H.
92-003059
Martin, Jim
92-002043
Martin, K. L. M.
92-002550
Martin, Siegfried
92-002218
Martin, Tony
92-003766
Martini, F.
92-002903
92-003749
Martinsen, Bernt
92-003148
Marttunen, M.
92-003606
Marty, Gary D.
92-003399
Marzocchi, Barbara
92-002555
Maskill, Mark G.
92-002191
Mason, C. F.
92-002889
Mason, E.
92-002127
Mason, Janet E.
92-003734
Masot, J.
92-003421
Mast, P.-G.
92-003308
Matisic, K.
92-003141
Matlock, Gary C.
92-003505
Matricia, T.
92-002698
Matsaberidze, K. G.
92-003243
Matsubara, Kumi
92-002671
92-002672
Matsuo, Masatoshi
92-003423
92-003424
Matsuyama, H.
92-003171

Matsuyama, Hiroko
92-003149
Matter, William J.
92-003771
Matthews, William J.
92-003667
Matuda, Ko
92-003573
Maugle, Paul D.
92-002198
92-002551
May, B.
92-003547
Mayden, Richard L.
92-003072
Mayer-Gostan, N.
92-002491
Mayer, I.
92-002419
Mayes, K. B.
92-002192
Mayr, M.
92-002821
McAllister, Don E.
92-002701
McAlpine, Donald F.
92-003225
McBride, Jack R.
92-002219
McBride, Richard S.
92-002904
McCann, James A.
92-003557
McCarthy, I. D.
92-002434
92-002552
McCarty, C. E.
92-003506
92-003552
McCarty, L. S.
92-003400
92-003440
McClellan, Andrew D.
92-002553
McCloskey, John T.
92-003401
McCosh, Morgan
92-003454
McCracken, Betsy W.
92-003495
McCulloch, B. R.
92-003011
McCullough, James N.
92-003507
McDonald, D. G.
92-002482
McDonell, John P.
92-002299
McDonough, Thomas A.
92-003084
McDorman, Ted L.
92-003735
McDowall, Bob
92-002372
McDowall, R. M.
92-002822
McDowell, Lizabeth A.
92-003484
McElroy, Douglas M.
92-002823
McEwan, Anthony G.
92-002188
McFall-Ngai, M.
92-002457
McFarland, Victor A.
92-003388
McFarlane, G. A.
92-003008
McFeeters, Brian D.
92-002089
McGillavry, Peter J.
92-002815
McGinty, Andrew S.
92-002128
McInerny, Michael C.
92-002905
McKay, L. R.
92-003085
McKay, Laura R.
92-002090
92-002099
McKay, Roland J.
92-002244
McKenna, James E., Jr.
92-002994
McKenzie, D.
92-002405
McLean, E.
92-002625
McLean, Ewen
92-002737
McLennan, Deborah A.
92-002824
McLeod, Donald
92-002099
McLoughlin, M. F.
92-003244
McManus, M. G.
92-002554
McMaster, M. E.
92-003402
92-003403
McMillan, I.
92-003085
McMillan, Ian
92-002090
McMillan, W. Owen
92-002738
McNabb, C. D.
92-002123
92-002129
McPhail, J. D.
92-003096
McRuer, Jeff K.
92-003311
McVey, James P.
92-002044
McVicar, A. H.
92-003221
92-003309
Meador, Michael R.
92-003667
Meadows, R.
92-003668
Meehan, W. R.
92-003475
Meffe, Gary K.
92-003034
92-003463
Meier, W.
92-003193
Meissl, Hilmar
92-002342
Mekuchi, Takayuki
92-003208
Melard, Ch.
92-002522
Mella, Jorge
92-002925
Melvin, Gary D.
92-002906

Mencarelli, Caterina
92-002555
Menchaca, J. A.
92-003589
Mendez, Miguel
92-002033
Mensinger, A. F.
92-002825
Mensinger, Allen Francis
92-002556
Merrett, N. R.
92-002907
Mesa, Matthew G.
92-002826
Metcalfe, N. B.
92-002613
Metcalfe, Neil B.
92-002995
Methven, David A.
92-002964
Meunier, F. J.
92-003522
Meyer, Axel
92-002739
Meyer, Kelly A.
92-002239
Meyers, Gary D.
92-003461
Michel, C.
92-003150
Michel, Christian
92-003151
Michelsen, Kim G.
92-002493
Middaugh, D. P.
92-002160
Middaugh, Douglas P.
92-002936
92-003370
92-003379
Miersch, Uwe
92-002312
Migeon, Bernard
92-003443
Miinalainen, Matti
92-002846
Mikodina, Ekaterina V.
92-002480
Mikulin, A. Ye.
92-003452
Miles, Edward L.
92-003736
Millar, R. B.
92-003607
Millar, Russell B.
92-003582
Miller, Andrew C.
92-003625
Miller, D. M.
92-003404
92-003438
Miller, Frances H.
92-003462
Miller, Norman W.
92-002547
Miller, Peter J.
92-002373
Miller, Robert Rush
92-003462
Millmore, J. P.
92-003695
Mills, A. L.
92-002316
Mills, C. P. R.
92-002694
Mills, Edward L.
92-002966
Mims, Steven D.
92-002557
Minckley, W. L.
92-002697
92-003463
92-003787
92-003790
92-003791
92-003792
Miranda, L. Esteban
92-003027
Miron, I.
92-003699
Misof, B. Y.
92-002765
Mitchell, Charles
92-003586
Mitchell, Joan R.
92-002045
Mittelbach, Gary G.
92-002834
Mitton, Gregory A.
92-002430
Mitzner, Larry
92-002908
Miura, Takeshi
92-002558
Mix, M. C.
92-003202
Miyake, Hiroya
92-003737
Miyake, T.
92-002374
92-002986
Miyamori, Eiji
92-002518
Miyamoto, Garret T.
92-002542
Miyasaki, Taiko
92-002559
Moberly, Mike
92-003454
Moccia, Richard D.
92-002090
92-002099
Mohamed, A. H.
92-003740
Mohamed, O. A.
92-003740
Mokady, S.
92-002479
Moller, Heino
92-003245
Moller, P.
92-002840
Molnar, Joseph J.
92-002130
Monaco, Mark E.
92-003705
Mongialo, Zbigniew
92-002268
Monras S., M.
92-002061
Monteiro, Luis R.
92-003405
Monteiro, Pedro M. S.
92-003773
Montgomery, James M.
92-002261
Monzon, Florencia
92-003574
Moon, Hae Young
92-002199

Moon, T. W.
92-002586
Moore, James C.
92-003370
Moran, P.
92-002708
Moreau, Jacques
92-003608
92-003639
Moreno-Amich, R.
92-002996
Moreno, Daniel
92-002240
Morgan, John D.
92-002560
Morgan, M. Joanne
92-002827
Morgan, Raymond P. III
92-003484
Mori, Ikue
92-002561
Mori, Koh-ichiro
92-003208
Mori, L.
92-002745
Morin, Roderick
92-002954
Morita, M.
92-003536
Morita, N.
92-003213
Moritomo, Tadaaki
92-002408
Moriwake, Aaron
92-002163
92-002542
Morriconi, E.
92-002432
Morrison, J. A.
92-003329
Morrissey, John Francis
92-002965
Morse, Macrae N.
92-003666
Mortensen, A.
92-003131
Mortensen, S. H.
92-003209
Moser, H. G.
92-002952
Moser, Mike
92-003246
Mote, Harry
92-002288
Motlokh, N. N.
92-002200
Mourad, Mohamed Hassan
92-002562
92-002828
92-003406
Moyle, Peter B.
92-003464
92-003678
92-003679
Mqolomba, Thobekile N.
92-003152
Mrowka, Wolfgang
92-002829
Mueller, Karl W.
92-002149
Muench, Kevin A.
92-002297
Mugiya, Yasuo
92-002563
Mullen, Dennis Michael
92-002830
Muller, E.
92-003396
Muller, Rudolf
92-003088
Mulvey, Margaret
92-003391
92-003393
Munday, B. L.
92-002075
Munger, R. S.
92-002564
Muniz, Ivar P.
92-003418
Munk, Ole
92-002375
Munkittrick, K. R.
92-003402
92-003403
Munns, Wayne R., Jr.
92-002813
Munoz-Chapuli, Ramon
92-003578
Munoz, L.
92-003352
Munro, Alan L. S.
92-002091
Munyandorero, Joseph
92-003639
Muona, Marja
92-003581
Muoneke, M. I.
92-003575
Murachi, S.
92-003387
Murad, A.
92-002505
Murai, Takeshi
92-002565
Murakami, Masahiro
92-002566
Murdoch, Scott P.
92-002831
Muroga, Kiyokuni
92-003208
Murphy, Brian R.
92-003609
Murphy, T. M.
92-003259
Murray, James D.
92-003579
92-003738
Murray, Reynold
92-002207
Musatov, S. P.
92-002832
Musick, John A.
92-002934
Mustafa, Md. Ghulam
92-002567
Mustafa, T.
92-002568
Muth, Robert T.
92-003526
Myers, James M.
92-002740
Myers, Thomas J.
92-003669
Myhr, E.
92-003164
Myhr, Egil
92-003148
Mytilineou, Chryssi
92-003035
Naas, Kjell E.
92-003520

Naess, Tore
92-003520
Naevdal, Gunnar
92-002092
92-002742
Naf, Carina
92-003340
Nagahama, Yoshitaka
92-002558
Nagahara, Motoharu
92-003208
Nagasawa, Toru
92-002958
Nagata, W. D.
92-002201
Nagata, Yoshikazu
92-002879
Nagel, R.
92-003453
Nagel, Roland
92-003371
Nakagawa, Heisuke
92-002472
92-002567
Nakai, Toshihiro
92-003208
Nakajima, Masamichi
92-002741
Nakamoto, Rodney J.
92-003310
Nakano, Hideki
92-003614
Namba, K.
92-003387
Namour, Philippe
92-003443
Nandeesha, M. C.
92-002131
Napier, I. R.
92-003329
Naranjo, Jose
92-002033
Narbonne, J. F.
92-003407
Nasci, Cristina
92-003408
Nashida, Kazuya
92-002855
92-002946
Naslund, Ingemar
92-003465
Natarajan, M.
92-002569
Natiello, F.
92-002405
Naumovski, Mirce
92-002997
Navarrete, G.
92-003352
Navarro, J. C.
92-002202
Navolotsky, Vladimir A.
92-002480
Navratil, P. M.
92-003746
Nazarova, G. I.
92-002850
Nebert, Paul D. N.
92-003530
Nechayev, I. V.
92-002832
Nedreaas, Kjell
92-002742
Nehlsen, Willa
92-003793
Neil, William H.
92-003615
Neill, William H.
92-002199
Neira, Angelica
92-003266
Nelson, David
92-002050
Nelson, David M.
92-003705
Nelson, Marcia K.
92-003285
Nelson, W. G.
92-003746
Nelson, William R.
92-002093
Nelson, William S.
92-002674
Nematipour, Gholam R.
92-002176
92-002609
Nemcsok, J.
92-003435
Nendza, M.
92-003409
Nerrie, Brian L.
92-002046
Ness, Andreas
92-003429
92-003527
Neto, Ana I.
92-003018
Neufeld, T.
92-002289
Neuman, Erik
92-003316
Neumann, Robert M.
92-003609
Nevalyonny, A. N.
92-002570
Neves, Richard J.
92-002883
Neville, Chrys-Ellen M.
92-002921
New Zealand Ministry of Foreign Affairs
92-003576
Newman, Michael C.
92-003391
92-003393
Newsome, Larry D.
92-003410
Newton, G. M.
92-002923
Newton, Scott H.
92-002203
Neyelov, A. V.
92-002360
Nho, Woong
92-003262
Nicholls, D. McEwen
92-003332
Nichols, James D.
92-003610
Niciu, E. E.
92-003025
Nickum, John G.
92-002047
Nicol, Alister U.
92-002571
Nie, P.
92-003247
Niederstatter, Harald
92-002528
Nielsen, Gurli
92-003411

Nielsen, Henrik H.
92-002534
Niemann, U.
92-002329
Niemi, Gerald J.
92-003274
92-003477
Nieto, Teresa P.
92-003160
Nigro, Anthony A.
92-003684
Nihouarn, Alix
92-002777
Nikl, L.
92-003153
Nilsson, Ake
92-003289
Nilsson, Eric E.
92-002743
Nilsson, Goran E.
92-002658
Nircho, M.
92-002441
Nishimura, Hitoshi
92-002744
Nishinokubi, Hideyuki
92-002272
Niwa, Eiji
92-003753
Nizovtsev, G. P.
92-003036
Njastad, O.
92-003288
No, Hong Kyoon
92-002572
92-002621
Noble, Richard L.
92-003083
Noga, Edward J.
92-003185
Nomura, Setsuzo
92-003144
92-003145
Norberg-King, Teresa J.
92-003398
Norcross, Brenda L.
92-002909
Normant, Y.
92-002629
Norris, J. E.
92-002999
Northcutt, R. Glenn
92-002623
Northwest Atlantic Fisheries Organization
92-003739
Novoa, B.
92-003198
Nowak, B.
92-003412
Nowak, Barbara
92-003413
Nowak, M.
92-003686
Nowsad, Alam AKM
92-003753
Nunez, Javier
92-002033
Nunez, Jose M.
92-003399
Nunley, Chad E.
92-002132
Nyakageni, Boniface
92-003639
O'Brien, John F.
92-003284
O'Brien, W. John
92-002833
92-003637
O'Connell, M. F.
92-003776
O'Connell, Martin T.
92-003248
O'Connor, P. K.
92-002573
O'Gorman, Robert
92-002966
O'Halloran, John
92-003249
O'Halloran, Susan L.
92-003306
O'Harte, Finbarr
92-002444
O'Reilly, J. C.
92-002998
Obach, A.
92-003154
Obenauf, S. D.
92-002447
Oberdorff, T.
92-003670
Oberholtzer, Mel
92-003474
Oda, Tatsuya
92-003384
Odening, Klaus
92-003194
Ogata, H.
92-002729
Ogden, David
92-003249
Ogutu-Ohwayo, Richard
92-003553
Ohya, Shotaro
92-002567
Oien, Nils
92-003565
Oikari, Aimo
92-003414
Ojwang-Okwor, Julius P.
92-002656
Oka, Yoshitaka
92-002407
Okimoto, D. K.
92-002506
Okimoto, Darren K.
92-002599
92-002653
Okuma, Emiko
92-002402
92-002403
Okumoto, Naoto
92-002407
Olafsen, J. A.
92-002574
Oliva-Teles, Aires
92-002575
Oliveira, C.
92-002745
Oliver, A. S.
92-002576
Oliver, J. M.
92-003656
Olla, Bori L.
92-002150
92-003269
Ollevier, F.
92-003230
Olli, Jan J.
92-002204
Olsen, K. Hakan
92-002658

Olson, Robert E.
92-003250
Olsson, N. Urban
92-003750
Omnes, M. H.
92-002629
Ong, Tun Liang
92-003774
Onozato, H.
92-002729
Oommen, O. V.
92-002414
Opperhuizen, Antoon
92-003354
92-003381
Orecka-Grabda, Teresa
92-003251
Orellana, Carmen P.
92-002864
Oris, James T.
92-003401
Ormerod, S. J.
92-002313
Orr, L. P.
92-003305
Ortega Garcia, Sofia
92-003037
Osenberg, Craig W.
92-002834
Oshiro, Takashi
92-002769
Osinov, A. G.
92-002746
92-002763
Osse, Jan W. M.
92-002395
92-003596
Oster, Jeanette M.
92-003700
Ostrowski De Nunez, Margarita
92-003252
Ostrowski, Anthony C.
92-002158
92-002205
92-002206
92-002454
Otis, C.
92-003055
Otsuka, Jinya
92-002504
Ott, Richard A., Jr.
92-003516
Ottera, H.
92-003611
Oug, Eivind
92-003330
Ourth, D. D.
92-002513
Ourth, Donald D.
92-003155
Overstreet, R. M.
92-003377
92-003446
Oviatt, Candace A.
92-002315
Owen, M.
92-003485
Ozburn, G. W.
92-003400
Ozouf-Costaz, C.
92-002759
Paaver, Tiit
92-002094
Pace, Ralphenia D.
92-003759
Pacer, Richard E.
92-002042
Padhi, B. K.
92-002747
Padisak, Judit
92-003647
Pagliarani, Alessandra
92-002649
Paine, Michael D.
92-003311
Pakhorukov, N. P.
92-002349
Pal, D.
92-003128
Pal, Debashis
92-002133
Pal, R. N.
92-003128
Palicka, Jiri
92-002241
92-002242
92-002243
Pallini, Vitaliano
92-002555
Palmegiano, G. B.
92-002097
92-002426
Palmegiano, Giovanni B.
92-003769
Palmegiano, Giovanni Battista
92-002324
Palzenberger, Margit
92-002350
92-002362
Pande, Jaishree
92-003367
Pandian, T. J.
92-003426
Pankhurst, N. W.
92-002577
Panon, G.
92-003522
Panula, Pertti
92-002335
Papaconstantinou, Costas
92-003035
Papp, E.
92-003328
Papst, M. H.
92-002095
92-003612
Papst, Michael H.
92-003588
Parazo, M. M.
92-002174
Pardo, J.
92-002584
Parham, Randy
92-003062
Parin, N. V.
92-003060
Parisi, E.
92-002756
92-003287
92-003740
92-003757
Park, L. K.
92-002460
Park, Myung Ae
92-003262
Park, Yeong Chull
92-002713
Parker, J. H.
92-003031
Parker, Nick C.
92-003155

Parks, Wesley W.
92-003508
Parmanne, Raimo
92-002937
Parra, Rene
92-003004
Parrent, M.
92-002759
Parrish, Donna L.
92-002983
Parrish, J. D.
92-002999
Parsons, G. R.
92-002578
Parsons, Glenn R.
92-002579
92-002835
92-002836
Parsons, J. Eugene
92-002166
Parsons, Milton G.
92-003664
Part, Peter
92-003337
Partearroyo, M. A.
92-003415
Partridge, J. C.
92-002580
Pascho, Ronald J.
92-003156
Paschos, John
92-002581
Pasternak, Hanoch
92-003601
Paszkowski, C. A.
92-003010
92-003688
Pati, A. K.
92-002423
Patrick, Robert
92-003312
Patzner, Robert A.
92-002381
Paul, A. J.
92-003000
Paulin, K. D.
92-003103
Paulovits, Gabor
92-003640
Pavlidis, Michael
92-002581
Pavlov, D. A.
92-002938
Pavlov, S. D.
92-002852
Pavlov, Yu. P.
92-003104
Pawluk, Mark
92-003384
Pawson, G.
92-003651
Pawson, M. G.
92-002897
92-003577
Payne, J. F.
92-003293
Pearce, A. F.
92-002310
Peavey, Stephanie
92-003754
Pedersen, L. O.
92-003222
Peirone, B.
92-003242
Pellegrino, C.
92-003253

...CONTINUED...
Pellegrino, C.
92-003740
92-003755
92-003756
92-003757
Pelletier, Dominique
92-003613
Pelster, Bernd
92-002582
Peltonen, H.
92-003641
Penaz, M.
92-003656
Penaz, Milan
92-003432
92-003486
Pendas, A. M.
92-002708
Penman, D. J.
92-002748
Penn, J.
92-003082
Pennell, W.
92-002070
Penttinen, Olli-Pekka
92-003001
Peoples, Robert A., Jr.
92-003557
Perenyi, Miklos
92-003642
Perera, K. M. Lakshmi
92-003254
Peres, Monica Brick
92-002939
Perez Martinez, Armando
92-003039
Perez Prieto, S.
92-003210
Perlman, Deborah Funkhouser
92-002583
Perra, Paul
92-003514
Perry, K. A.
92-002584
Persat, Henri
92-002778
92-003775
Perschbacher, Peter W.
92-002124
92-003758
Pet, Jos S.
92-003590
Peter, R. E.
92-002639
Petering, Raymond W.
92-002963
Peterman, Randall M.
92-003603
Peters, Edward J.
92-003030
Petersen, Christopher W.
92-002585
Petersen, Frerk
92-003245
Peterson, James E.
92-002264
Peterson, John D., Jr.
92-002837
Peterson, Mark S.
92-002838
Peterson, R. H.
92-002126
92-002376
92-003466
Peterson, Richard E.
92-003445

Petrell, Royann
92-002106
Petrell, Royann J.
92-002289
Peuhkuri, Nina
92-002841
Pfeil-Putzien, C.
92-003158
Philipp, David P.
92-003554
Phillips, P. C.
92-002988
Phillips, Peter C.
92-002134
92-002207
Piatt, John F.
92-002964
Pickering, A. D.
92-002096
Piedrahita, Raul H.
92-002290
92-002291
92-002292
92-002301
Pierce, G. J.
92-003002
Pierce, Richard H.
92-003416
Pietsch, Theodore W.
92-003061
Pigg, Jimmie
92-002910
92-002911
92-003062
Pike, A. W.
92-003261
Pike, Alan W.
92-003182
Piken, Harry
92-002377
Pilar Vilas Minondo, Ma.
92-003210
Pilling, S. J.
92-003415
Pinchuk, V. P.
92-002378
Pinheiro de Carvalho, Eliana
92-002135
Pinochet, H.
92-003352
Pirini, Maurizio
92-002649
Pister, Edwin Philip
92-003467
Plahar, Wisdom A.
92-003759
Planas, J.
92-002475
Playle, Richard C.
92-003417
Plisetskaya, E. M.
92-002586
Plisetskaya, Erika M.
92-002489
92-002490
Plumb, J. A.
92-003152
Poglida Silveira, W.
92-002587
Poh, C. H.
92-002588
Pohar, Jurij
92-002749
Polenov, A. L.
92-002601
Poleo, Antonio B. S.
92-003418
Politou, D.
92-002516
Poltronieri Pacheco, Tania Denise
92-002135
Ponce Diaz, German
92-003037
Poncin, Alain
92-002459
Ponomarev, V. I.
92-002589
Ponomarev, V. Yu.
92-002811
Pont, D.
92-002912
Ponton, D.
92-003721
Ponzoni, N.
92-003755
92-003756
Portt, C. B.
92-003402
92-003403
Poston, Hugh A.
92-002208
92-002590
Poulin, R.
92-003313
Powell, Mark D.
92-002591
Powell, Roger L.
92-002592
Power, D. M.
92-002593
Power, J.
92-002376
Powers, D. A.
92-002688
Poynton, S. L.
92-003175
Prabhavathi, B.
92-003431
Pradeep, H. S.
92-002048
Pramanik, A. K.
92-003128
Prat, F.
92-002406
Pravda, D.
92-002501
Present, T. M. C.
92-003003
Price, D. J.
92-002690
Pringle, Catherine M.
92-003487
Pritchard, G. I.
92-002067
Privitera, Lisa A.
92-002940
Prokes, Miroslav
92-003038
92-003039
Prophet, Carl W.
92-002839
Prophet, N. Kay
92-002839
Propst, David L.
92-002692
Prost, M.
92-003255
Puchalski, W.
92-003686
Puga, S.
92-003115

Punsly, Richard
92-003614
Purcell, Lisa M.
92-002430
Purdy, Rich
92-003419
Purser, G. J.
92-002075
Pusch, Martin
92-002895
92-003040
Pusey, B. J.
92-003671
Puzdrowski, R. L.
92-002379
Pyrovetsi, Myrto
92-003643
Qadri, Sami U.
92-002701
Quaglino, G.
92-002097
92-003287
Quaglino, Giuliana
92-003769
Quattro, Joseph M.
92-002750
Quiggin, John
92-003515
Rabbinge, Rudy
92-003590
Radenko, V. N.
92-002200
Rader, Kathleen
92-002880
Radhakrishnaiah, K.
92-003431
Radishcheva, O. L.
92-002200
Radzikhovskaya, Ye. K.
92-002938
Rae, G. A.
92-002432
Raesly, Richard Lewis
92-002751
Raga, J. Antonio
92-003574
Raghavan, S. L.
92-002117
Rahel, Frank J.
92-003654
Rahman, A.
92-002164
92-002748
Rahman, M. F.
92-002117
Raibley, Paul T.
92-003672
Raj, S. P.
92-002112
Rajan, M. R.
92-002112
Rakocy, James E.
92-002293
Rakonczay, Z.
92-003435
Ralphs, J. R.
92-002328
92-002594
Ralston, Stephen
92-002962
92-003032
Ramanathan, S.
92-002454
Ramboux, Anne C. R.
92-002136
Rana, Krishen
92-002849
Randall, Clive
92-002065
Randall, Clive F.
92-002294
92-002450
Randall, John E.
92-003091
Raney, Donald C.
92-003599
Rankin, C. H.
92-002840
Rankin, J. C.
92-002461
Ranta, Esa
92-002841
92-003118
92-003644
Rao, J. V. Ramana
92-003439
Raphals, Philip
92-003488
Rasero, R.
92-002685
92-002752
Rask, Martti
92-003314
92-003644
92-003645
Rasmussen, Gorm V. H.
92-002471
Rasmussen, Joseph B.
92-003383
Rasotto, Maria Berica
92-002380
Ratts, Vicki D.
92-003155
Ravera, O.
92-003646
Ravi, J.
92-002209
Rawdah, T. N.
92-003275
Rawson, Mac V., Jr.
92-003256
Ray, Arun Kumar
92-002137
Ray, P. K.
92-003427
Re, Pedro
92-002967
Reay, P. J.
92-003063
Recksiek, Conrad
92-003733
Reddin, D. G.
92-003776
Reddy, N. R.
92-003760
Reddy, P. U. M.
92-003439
Redfern, B.
92-002232
Redfield, Garth W.
92-003693
Redondo-Muller, C.
92-002595
Reed, Clarence W.
92-003534
Reed, Elisabeth
92-003148
Reed, Jeffrey R.
92-002913
Reganold, John P.
92-003662

Reid, Albert O.
92-002046
Reid, S. D.
92-002564
Reigh, Robert C.
92-002210
Reimchen, T. E.
92-002842
Reinert, Robert E.
92-003761
Reinertsen, H.
92-003638
Reis, E. G.
92-003577
Reis, Roberto E.
92-003102
92-003105
Reitan, L. J.
92-003164
Reitz, E. J.
92-003025
Renard, Andre
92-002459
Renaud, Francois
92-002731
Renault, Tristan
92-003331
Resink, J. W.
92-002645
Revels, Harrell
92-002727
Rey, Juan Carlos
92-003578
Rey, P.
92-002617
Rhinesmith, P.
92-003489
Rhodehamel, E. J.
92-003760
Rhodes, Raymond J.
92-002049
Rice, D. A.
92-003259
Richards, R. H.
92-002437
92-003139
92-003204
Richardson, James
92-003510
Richman, N. Harold
92-002599
Richman, N. Harold III
92-002653
Richmonds, Chelliah R.
92-003356
Richter, Heinz
92-002218
Rico, Ciro
92-002753
Riehl, Rudiger
92-002381
Riffart, G.
92-003165
Riffo L., Renzo
92-003119
Rigolino, M. G.
92-002587
Riley, Dennis Michael
92-003257
Riley, John G.
92-002278
Rinne, John N.
92-003673
Ristov, M. D.
92-002507
Ritchie, Scott A.
92-003468
Rito, Ana P.
92-002774
Ritter, Janice Wasylenki
92-002244
Rivas, C.
92-003198
Robb, A. P.
92-002985
Robert, F.
92-003258
Robert, Rene
92-003004
Roberts, Daniel E., Jr.
92-003562
Roberts, J. L.
92-002483
Roberts, Robert
92-002470
Robertson, John C.
92-002382
Robertson, Steven D.
92-002245
Robichaud, David A.
92-002843
Robin, James E.
92-002260
Robin, Jean-Paul
92-003706
Robinette, H. Randall
92-002211
Robinson, Edwin H.
92-002210
92-002212
Robinson, James V.
92-003013
Robinson, Richard K.
92-003794
Roby, D.
92-002754
Roche, H.
92-003339
Rochow, T. F.
92-003489
Rode, Robert A.
92-002234
Rodger, H. D.
92-003259
Rodriguez Saint-Jean, S.
92-003210
Rodseth, O.
92-003209
Roem, Andries J.
92-002213
Rogers, Gary L.
92-002214
92-002295
Rohovec, J.
92-003165
Rohovec, J. S.
92-003126
92-003159
Rokiah, L. A.
92-003188
Rolff, Carl
92-003340
Rolston, Holmes III
92-003490
Rome, Lawrence C.
92-002596
92-002597
Romeo, Michele
92-003420
Romero, A.
92-002620

Romero, Francisco
92-002650
Ron, Benny
92-002598
92-002599
Roncero, V.
92-003421
Ronnberg, Olof
92-002098
92-003315
Rooker, J. R.
92-003707
Roper, Bill
92-002050
Rose, Gary J.
92-002600
Rosenberg, Andrew A.
92-003500
Rosenblum, P.
92-002502
Rosenblum, P. M.
92-002192
Rosenman, Robert
92-003741
Rosenthal, H.
92-002232
Roshchin, E. A.
92-002881
Rosler, Hans-Jurgen
92-002138
92-002246
92-002247
Ross, B.
92-002569
Ross, L. G.
92-002539
92-002540
92-002569
Ross, Stephen T.
92-002874
Ross, William
92-002844
Rostova, N. S.
92-002384
Roszell, L. E.
92-003422
Rottereng, Per Johan
92-003286
Roubach, Rodrigo
92-002231
Rouille, Y.
92-002601
Rountree, R. A.
92-003087
Roush, Thomas H.
92-003380
Roustan, Claude
92-002410
Rout, M.
92-002139
Roux, A. L.
92-003656
Rowe, David
92-003064
Rozas, G.
92-002617
Ruardij, P.
92-003605
Rubagumya, Alphonse
92-002130
Rubec, Louise A.
92-003260
Rubino, Michael C.
92-002051
Rubinsky, B.
92-002602
Rubio, J.
92-002682
Ruiz, Gloria
92-003114
Rulifson, R. A.
92-002474
Rulifson, Roger A.
92-003579
92-003738
Runham, N. W.
92-002401
92-002667
92-002668
Runn, P.
92-003368
Ruohonen, Kari
92-002161
Ruokolahti, Curt
92-002098
92-003315
Russel, G.
92-003203
Russell, Arturo
92-002207
Russiello, M.
92-002330
Russom, Christine L.
92-003410
Rutherford, D. Allen
92-003675
Rutkowski, Joel P.
92-003433
Rutledge, William P.
92-003552
Ruzzante, Daniel E.
92-002845
Ryabov, I. N.
92-003299
Ryder, R. A.
92-003782
Rylander, Michael K.
92-002356
Ryu, Hoon
92-002523
Saarikari, Vesa
92-002846
Sabalones, Juan
92-002248
Sabates, Ana
92-002383
Sabhi, Y.
92-003357
Sabo, Matthew J.
92-003674
92-003675
Sadar, Marianne D.
92-002737
Sadler, Sherry E.
92-002090
92-002099
Sah, Jaysingh
92-003701
Saint-Paul, U.
92-003780
Saito, Shoji
92-003423
92-003424
Sakaguchi, Morihiko
92-002559
92-003748
Sakai, M.
92-003173
Sakai, Masahiro
92-003157
Sakamoto, Tatsuya
92-002561

Sako, Hiroshi
92-003145
Sakr, Saber A.
92-003425
Sakthivel, M.
92-003426
Salinas-Zavala, Cesar A.
92-002933
Salini, J. P.
92-003005
Salmanov, A. V.
92-002384
Salojarvi, Kalervo
92-003555
Saltveit, Svein Jakob
92-003658
Salzet-Raveillon, Beatrice
92-003355
Samadpour, M.
92-002460
Sambrook, H. T.
92-003697
Sameshima, Mamoru
92-003384
Sami, S.
92-003158
Sampath, K.
92-003426
Samuelsen, O. B.
92-003137
Samuelsen, Ole B.
92-003520
San Roman, N. A.
92-002432
Sanchez, J.
92-002475
Sanchez, J. A.
92-002682
Sanchez, Paz
92-002033
Sanders, J. E.
92-003159
Sanders, Randall E.
92-003065
Sandlund, O. T.
92-002993
Sandstrom, Olof
92-003316
Sanger, Alexandra M.
92-002385
Sanjuan, J. L.
92-003211
Sanni, Steinar
92-002255
Sano, Natsumi
92-003212
Sano, T.
92-003213
Sano, Tokuo
92-003212
Santha, Calista Rohini
92-003615
Santos, B. H.
92-002162
Santos, Ysabel
92-003160
Saralaya, K. V.
92-003752
Sargent, J. R.
92-002202
Sargent, Kenneth W.
92-003306
Sarig, S.
92-002052
Sarkar, S. K.
92-002140
Sarra, C.
92-002426
Sarvala, Jouko
92-002846
Sas, Emilia
92-002603
Sato, Georgina M.
92-003464
Sato, Mamoru
92-002559
Satoh, Hideo
92-002794
Saul, Bruce
92-002901
Saunders, Richard L.
92-002100
92-002104
Savenkova, T. P.
92-002941
Savino, Jacqueline F.
92-002847
Saxena, M. P.
92-003427
Saxena, P. K.
92-003317
Sbikin, Yu. N.
92-002215
Scarabello, M.
92-002604
Scarpa, John
92-003161
Schaefer, Kurt M.
92-002386
Schaefer, Scott A.
92-003105
Schafer, J. W.
92-002061
Schartl, Manfred
92-002706
Scheffel, Hans-Joachim
92-003708
Scheffer, Marten
92-003616
Schei, Idar
92-003286
Scheid, Peter
92-002582
Scheidt, Douglas M.
92-002838
Schenck, Russell A.
92-003012
Scheuermann, Dietrich W.
92-002605
Schiemer, F.
92-003676
Schiemer, Fritz
92-002519
92-002848
92-003470
Schirmer, Michael
92-003708
Schleicher, Joachim
92-002218
Schleiger, Steve
92-002901
Schlenk, Daniel
92-003428
Schlosser, Isaac J.
92-002121
Schlott-Idl, Karin
92-002141
Schmidt, C. G.
92-002541
Schmitt, M.
92-003193

Schmitt, Russell J.
92-002802
Schneider, A.
92-003676
Schneider, Friederike I.
92-003491
Schobben, H. P. M.
92-003320
Schoffmann, Johannes
92-003066
Scholten, M. C. Th.
92-003320
Schoonbee, H. J.
92-003560
Schorr, Mark
92-003701
Schreibman, M. P.
92-002548
Schreiner, Dean F.
92-003701
Schuler, R. J., Jr.
92-003265
Schultz, Eric T.
92-002942
Schumacher, James D.
92-002882
Schuur, Anthonie M.
92-002261
Schwab, Robert G.
92-002435
Schwanck, Erkki
92-002849
Schwartz, E. A.
92-002452
Schwartz, Frank J.
92-002387
Schwartz, M.
92-002424
Schwartzlose, Richard A.
92-002933
Schwarz, F. J.
92-002606
Schwarzbaum, Pablo J.
92-002607
Schwedler, T. E.
92-003170
Schwedler, Thomas E.
92-002113
Schwing, Franklin B.
92-002311
Scoppettone, G. Gary
92-003795
Scott, V.
92-003290
Searcy-Bernal, Richardo
92-003617
Sebert, Philippe
92-002608
Secombes, C. J.
92-002449
92-003261
Sedlaczek, Jurgen
92-003194
Sedletsky, I. V.
92-002949
Sedova, Marina A.
92-002480
Seenappa, D.
92-003268
Seesock, Wendy C.
92-003325
Segner, Helmut
92-003429
Seidman, Ephraim R.
92-002203
Seinen, Willem
92-003353
92-003354
Seligman, Peter F.
92-003295
Seliverstov, A. S.
92-003728
Semenenko, M. N.
92-003297
Seratlich, D.
92-002341
Serrano, Julio A.
92-002609
Settle, Lawrence R.
92-003705
Sevigny, J. M.
92-002754
Sewell, Amy T.
92-002585
Seymour, Edward Andrew
92-002255
Seyoum, Seifu
92-002755
Shackel, N. L.
92-002698
Shanavas, K. R.
92-003186
Shapiro, Douglas Y.
92-002610
Shardo, J. D.
92-002388
Sharma, S.
92-002424
Sharp, G. J. E.
92-003261
Sharpe, William E.
92-003278
Shaw, Susan
92-002101
Shaw, W.
92-003008
Shcherbachev, Yuri N.
92-003098
Shcherbak, G. I.
92-003067
Shears, M. A.
92-002695
Shed'ko, S. V.
92-002389
Sheehan, Betsy P.
92-002053
Sherbakov, D. Yu.
92-002715
Sheridan, M. A.
92-002463
92-002492
92-002573
92-002611
Sheridan, Mark A.
92-002446
92-002493
Sherstobitov, A. O.
92-002487
Sherstyukov, A. I.
92-002850
Shetty, H. P. C.
92-002131
Sheyko, B. A.
92-002344
Shibley, George P.
92-002042
Shields, F. Douglas, Jr.
92-003677
Shigonova, T. A.
92-003742

Shima, N.
92-003213
Shimizu, Toshikazu
92-002567
Shimizu, Yutaka
92-003748
Shinano, Haruo
92-002517
Sholokhov, A. M.
92-002530
Sholto-Douglas, A. D.
92-003743
Sholto-Douglas, A. Dawn
92-003773
Shustov, Yu. A.
92-002858
Sibbing, Ferdinand A.
92-002395
Sibley, P. K.
92-003403
Sibour, M.
92-002756
Sideleva, V. G.
92-002715
Sidell, B. D.
92-002644
Sidie, J. M.
92-002612
Siepen, Gabriele
92-002851
Sierra, Luis M.
92-002867
Sigler, John W.
92-003777
Sikka, Harish C.
92-003433
Silkenat, W.
92-003219
Silva, Alexandra
92-002390
Sim, Doo Saing
92-003262
Simco, B. A.
92-002636
Simell, Maarit
92-002219
Simon, Bernard
92-002608
Simons, Marcus
92-003068
Simonson, Timothy D.
92-002883
Simpson, A. L.
92-002613
Simpson, Ellen M.
92-003499
Simpson, K. L.
92-002612
Simpson, Kenneth L.
92-002195
Sin, Y. M.
92-003181
92-003187
Singarajah, K. V.
92-002614
Singer, T. D.
92-002413
92-002414
Singh, Amita
92-002615
Singh, P. B.
92-003430
Singh, Sukhpal
92-003345
Singh, T. P.
92-002615
Sinis, A.
92-003041
Sire, M. F.
92-002616
Sissenwine, Michael P.
92-003500
Sites, Robert W.
92-003770
Siti, A. Z.
92-003188
Sivaramakrishna, B.
92-003431
Skilbrei, Ove T.
92-002102
Skinner, Carol
92-002853
Skorobogatov, M. A.
92-002852
Skulason, S.
92-002993
Skulskii, I. A.
92-002487
Slavkin, H. C.
92-002363
Slip, David J.
92-003318
Sloan, Ronald J.
92-003284
Slobodyanyuk, S. Ja.
92-002715
Smal, Jean
92-002459
Smeenk, C.
92-003568
Smeltzer, John F.
92-002142
Sminkey, Thomas R.
92-002943
Smith, A. D.
92-003400
Smith, Charlie E.
92-002086
92-002087
Smith, D. C.
92-002923
Smith, D. David
92-002444
Smith, Gordon C.
92-003709
Smith, Grant Gill
92-003777
Smith, H.
92-002054
Smith, I. R.
92-003403
Smith, J. D.
92-002317
Smith, Lewis
92-002055
Smith, M. M.
92-002374
Smith, M. W.
92-002543
Smith, Michael J.
92-002074
Smith, P.
92-002216
Smith, R. Jan F.
92-002804
Smith, R. L.
92-003005
Smith, S. L.
92-002447
Smith, Sarah J.
92-002150

Smith, Sarah Jane
92-002149
92-003269
Smith, Stephen A.
92-003185
Smith, T. I. J.
92-003449
Smith, Theodore I. J.
92-002120
92-002182
Smitherman, R. O.
92-002056
Sneed, Paul G.
92-003580
Snelson, Franklin F., Jr.
92-003069
Snir, Israel
92-002143
Snorrason, S. S.
92-002993
Snyder, Richard A.
92-003551
Soares, Delza M.
92-002784
Sobocinski, Andrzej
92-002268
Soengas, J. L.
92-002617
Soivio, Antti
92-002618
92-003581
Soler, F.
92-003421
Soletchnik, Patrick
92-002155
Soliman, M. K.
92-003139
Solomon, D. J.
92-003697
Soltz, David L.
92-003463
Sommerville, C.
92-002624
Sosnicki, Andrzej
92-002596
92-002597
Souza, Lawrence M.
92-002737
Sower, S. A.
92-002527
92-002584
92-002651
Speare, David J.
92-003162
Spence, J. A.
92-002103
Spies, Gunter
92-002884
Spindler, Kurt P.
92-003012
Spindler, T.
92-003676
Spindler, Thomas
92-003556
Springate, John
92-002065
Sprules, W. Gary
92-003629
Squiers, T. S., Jr.
92-003459
Sreedevi, P.
92-003431
Srivastava, Rakesh K.
92-002619
Srivastava, Rakesh Kumar
92-002944
Stables, T. B.
92-002968
Stagg, R. M.
92-003319
Staggs, Michael D.
92-003512
Stanek, Zdenek
92-003432
Stanley, Jon G.
92-003557
Stanley, Lisa Ann
92-003163
Starling, Charles C.
92-002727
Steadman, Bryan L.
92-003372
Steele, Craig W.
92-002853
Steen, John P., Jr.
92-002819
Stefan, Gary E.
92-002057
Stefanovski, V.
92-002507
Stefansson, S. O.
92-002635
Stefansson, Sigurd O.
92-002104
Steffens, Werner
92-002105
92-002217
92-002218
Stein, M.
92-003492
Stein, Roy A.
92-002847
Steinacker, A.
92-002620
Sterba, Oldrich
92-002816
Stergiou, K. I.
92-003041
92-003618
Stevens, E. D.
92-002854
Stevens, E. Don
92-002476
Stevenson, Douglas
92-003777
Steward, A. Ruth
92-003433
Stewart, Donald J.
92-003627
Stewart, James E.
92-003558
Steyn, Gert J.
92-002275
Stickney, Robert R.
92-002213
Stleger, J.
92-002429
Stober, Quentin J.
92-003761
Stobie, M.
92-003124
Stockly, Bill
92-003061
Storebakken, Trond
92-002572
92-002621
Storruste, Anders
92-003341
Stouracova, Ilona
92-003486
Strahle, U.
92-002757

Strange, Elizabeth M.
92-003678
92-003679
Strange, Rex Meade
92-003006
Stratton, Barry L.
92-002892
92-002920
Stratton, Richard F.
92-002249
92-002250
92-002251
Strauss, Richard E.
92-002348
92-002758
Strawn, R. Kirk
92-003615
Strekozov, B. P.
92-003343
Streufert, Jonathan M.
92-003156
Stricko, James P.
92-003065
Struthers, William
92-003359
Struve, Michael R.
92-002296
Stuesse, Sherry L.
92-002622
92-002623
Styer, E. L.
92-003176
92-003189
Suarez, R. K.
92-002466
Subandar, A.
92-002106
Subasinghe, R. P.
92-002624
Subramanyam, Mark
92-002189
92-002203
Sukumar, A.
92-003434
Sukumasavin, N.
92-002625
Sulaiman, Z.
92-002748
Sullivan, Barbara K.
92-002315
Sullivan, C. V.
92-002631
Sullivan, Craig V.
92-002510
92-002524
92-002626
92-002634
Sumagaysay, Neila S.
92-002144
Summerfelt, Robert C.
92-002116
Sumpter, John P.
92-003042
Sumpton, Wayne
92-002885
Sun, L.-Z.
92-002627
Sun, Lian-Tien
92-002258
92-002436
Sunaga, Tetsuo
92-003070
Sundby, Anne
92-002628
Sunderam, R. I. M.
92-003412
Suquet, M.
92-002629
Suresh, A.
92-003431
Sutko, J. L.
92-002669
Sutter, Frederick C. III
92-003086
Sutterlin, A. M.
92-002854
Suttkus, Royal D.
92-003106
Sutton, Michael
92-003796
Suuronen, Petri
92-003582
Suzuki, Hiromi
92-002504
Suzuki, Ryo
92-002671
92-002672
Suzuki, Tetsuya
92-003360
Svensson, B.-M.
92-003142
Swaim, William Duane III
92-002630
Swain, Hilary
92-003797
Swann, Ladon
92-002186
Swanson, P.
92-002631
Swanson, Sherman
92-003669
Swart, Martha K. J.
92-002762
Swartz, David George
92-003744
Sweatman, James J.
92-003043
Sweeting, R. M.
92-002632
92-002633
Swing, Cecil Kelly
92-003107
Swink, William D.
92-003007
Sylvia, Gilbert
92-003762
Szabo, A.
92-003435
Szakolczai, J.
92-003130
Szalai, Alexander J.
92-003120
92-003263
92-003264
Szedimayer, Stephen T.
92-003710
Szedlmayer, S. T.
92-003087
Szyper, James
92-002282
Szyper, James P.
92-002145
Szyyper, J. P.
92-002818
Tabata, Y. A.
92-002587
Tabit, Christopher R.
92-002943
Tabor, Roger A.
92-003702
Tachihara, Katsunori
92-002945

Takahashi, Hiroya
92-002558
Takahashi, Toyomi
92-002946
Takama, Kozo
92-003360
Takashima, Fumio
92-002769
Takayama, Keisuke
92-002563
Takeda, Shigenobu
92-002156
Taksdal, T.
92-003164
Talbot, A. J.
92-002698
Tallandini, Laura
92-003408
Talwar, P. K.
92-003108
Tamaki, S.
92-003436
Tamaru, Clyde S.
92-002163
92-002542
Tan Qi-Jia
92-003073
Tan, C. H.
92-002648
Tanasichuk, R. W.
92-003008
Tang, Hung-Chi
92-002436
92-003447
Taniguchi, Nobuhiko
92-002806
Tanoue, Akira
92-003423
92-003424
Tao, Yunxia
92-002634
Taphorn, Don
92-003071
Taranger, G. L.
92-002635
Taranger, G. Lasse
92-002104
Tarbox, Kenneth E.
92-002899
92-002900
92-002919
Tatner, Mary F.
92-002498
Tatrai, Istvan
92-003647
Taufik, L. R.
92-002184
Tave, Douglas
92-002058
92-002146
92-002734
Tawabini, B. S.
92-003275
Taylor, D. S.
92-002856
Taylor, D. Scott
92-003468
Taylor, David T.
92-003700
Taylor, Frank S.
92-002059
Taylor, Jeffrey L.
92-002203
Taylor, M. H.
92-002655
Taylor, W. W.
92-003077
Teichert-Coddington, David
92-002147
Teichert-Coddington, David R.
92-002273
92-002274
Terry, Inigo
92-002033
Teskeredzic, Zlatica
92-002219
Tessari, Valentina
92-002950
Tetreault, Fred
92-003583
Teuber, C.
92-003165
Teugels, G. G.
92-002732
92-002759
92-002760
Tewari, Hema
92-003367
Thacker, S. G.
92-002164
Theochari, Vasso
92-002581
Theocharis, V. S.
92-002107
Thieck, M.
92-003352
Thomas, G. L.
92-002968
Thomas, Peter
92-002524
Thomas, Philip T.
92-003197
Thomas, William L.
92-002042
Thomerson, Jim
92-003071
Thompson, Frederick M.
92-003496
Thomsen, Robert D.
92-002297
Thomson, Keith S.
92-002334
Thorburn, Margaret A.
92-003619
Thorgaard, Gary H.
92-002761
Thorhaug, A.
92-003437
Thorn, William C.
92-003680
Thorpe, A.
92-002456
Thorpe, J. E.
92-002613
Thorpe, John E.
92-002995
Thouard, Emmanuel
92-002155
Thrush, Mark
92-002065
Thuringer, Pamela L.
92-002804
Tidwell, James H.
92-002220
92-002221
92-002229
Tiersch, T. R.
92-002636
Tighe, Kenneth A.
92-003109

Timmermans, Jean-Pierre
92-002605
Timmermans, L. P. M.
92-002396
Timmons, Michael B.
92-002108
92-002259
92-002298
Timmons, T. J.
92-003265
Timo, Makinen
92-002222
Tindall, D. R.
92-002988
92-003404
92-003438
Tinner, Barbro
92-002603
Tisona, Eli
92-002143
Titus, Eric Ellis
92-002637
Tkhorikov, V. B.
92-002349
Tobin, Catherine M.
92-002863
Toivonen, Jorma
92-002914
Tokranov, A. M.
92-003009
Toledo-Filho, S. A.
92-002745
Toledo, J. D.
92-002638
Tolonnikov, G. Yu.
92-002109
Tomasini, J.-A.
92-002873
Tomasso, J. R.
92-003170
92-003449
Tomasso, Joseph R.
92-002113
Tominaga, Osamu
92-002855
92-002946
Tonn, W. M.
92-003010
92-003688
Toone, William D.
92-003559
Toranzo, A. E.
92-003198
Toranzo, Alicia E.
92-003160
Torgersen, Yngve
92-003286
Torhy, Corinne
92-003199
Torres, Patricio
92-003266
Tosato, Maria L.
92-003398
Toth, L.
92-003130
Toyohara, Haruhiko
92-003748
Tracy, Dan E.
92-002311
Trajkovska, K. S.
92-002507
Travis, Joseph
92-002674
92-003458
Trebitz, Anett S.
92-003620
Tremaine, S. C.
92-002316
Trexler, Joel C.
92-002674
Trigari, Gianni
92-002649
Trinkaus, J. P.
92-002391
Trinkaus, Madeleine
92-002391
Trombetti, Fabiana
92-002649
Troshina, N. N.
92-003297
Trout, Lamarr
92-002060
Trudeau, V. L.
92-002639
Trummel, Donald E.
92-002640
Trunov, I. A.
92-003110
Trush, William Joseph
92-003681
Tsai, Meei-Ju
92-003751
Tsang, Paul C. W.
92-002641
Tsegenidis, T.
92-002516
Tsevis, Nikolaos
92-002223
Tseytlin, V. B.
92-003621
Tsuchiyama, Takashi
92-003384
Tsukamoto, Katsumi
92-003044
Tsukuda, Hiroko
92-002642
Tsuneki, Kazuhiko
92-002392
Tucker, John W., Jr.
92-002165
92-002166
Tufts, B. L.
92-002643
Tulasi, S. J.
92-003439
Tullis, A.
92-002644
Tuncer, Haluk
92-002224
92-002225
Tupper, M.
92-002915
Tupper, M. H.
92-002916
Turchetto, Margherita
92-003408
Turk, Philip E.
92-002286
Turkstra, E.
92-003320
Turnbull, Ross D.
92-002298
Turner, B. J.
92-002856
Turner, Paul R.
92-003673
Turunen, Timo
92-003321
Tyler, A. V.
92-002917
Tyler, Jeffrey Alan
92-003622

Tyler, William A. III
92-003711
Tyus, H. M.
92-003493
Tyus, Harold M.
92-003798
Tyvold, Torbjorn
92-002255
92-002267
Tzeng, W.-N.
92-003045
Uchiyama, Hiroyuki
92-002393
Ueda, Tomohiro
92-003144
Uematsu, K.
92-003387
Ugedal, O.
92-003288
Uhitil, S.
92-003141
Uiblein, Franz
92-002857
Ulloa-Rojas, J.
92-002187
Ultsch, Gordon R.
92-003391
Unger, Michael A.
92-003295
Untergasser, Dieter
92-003190
Unwin, Martin
92-003745
Uraiwan, S.
92-002698
Urawa, S.
92-003191
Utter, F. M.
92-002682
Utter, Paula Sue
92-002394
Vaara, Timo
92-002219
Vacchi, M.
92-002756
Vachta, Richard
92-002480
Vadas, Robert L., Jr.
92-003682
Valcarce, Ron
92-003777
Valdes-Munoz, Emilio
92-002870
Valkirs, Aldis O.
92-003295
Valtonen, E. T.
92-003218
Van Beek, William
92-003312
van den Berg, Coen
92-002395
van den Heuvel, M. R.
92-003440
van den Hurk, R.
92-002645
Van den Thillart, Guido E. E. J. M.
92-002646
van Densen, W. L. T.
92-003626
van Densen, Wim L. T.
92-003590
van der Bank, Federick H.
92-002762
Van der Boon, Jeroen
92-002646
Van Der Kraak, G. J.
92-003403
Van der Kraak, Glen
92-002521
van der Meer, J.
92-003192
van der Merwe, N. J.
92-003743
van der Ploeg, Martine
92-003691
van der Spoel, S.
92-002969
van der Wal, M.
92-003476
Van Der Zandt, Peter T. J.
92-003441
Van Driessche, I.
92-002522
Van Every, L. R.
92-003240
Van Every, Lynn R.
92-003267
Van Handel, Emile
92-003373
Van Leeuwen, Cees J.
92-003441
Van Oostrum, J.
92-002580
Van Tassell, James
92-003076
Van Veld, Peter A.
92-003442
van Vliet, K. J.
92-002647
van Vugt, Yvette
92-003596
van Vuren, Johan H. J.
92-002275
92-003374
van Winkoop, A.
92-002396
Vanden Bossche, J. P.
92-003469
Vanover, L.
92-003772
Varghese, T. J.
92-002131
Varnavskaya, Nataly V.
92-002676
Vasil'yev, V. P.
92-002763
Vasil'yeva, E. D.
92-002763
Vass, W. P.
92-003290
Vatcharapijarn, Yupha
92-002207
Vazquez, E.
92-002682
Velikanov, A. Va.
92-003046
Veloso, Alberto
92-002764
Venkatesh, B.
92-002648
Venkateshappa, T.
92-003268
Venter, A. J. A.
92-003560
Ventling-Schwank, Andrea
92-003088
Ventrella, Vittoria
92-002649
Vera, Maria Ines
92-002650

Verani, Jose R.
92-003070
Verhaar, Henk J. M.
92-003441
Verheij, H. J.
92-003476
Vernier, J. M.
92-002616
Verspoor, E.
92-002691
Veselov, A. E.
92-002858
Veshchev, P. V.
92-002947
92-003089
Vethaak, D.
92-003192
Vial, M. V.
92-003165
Victor, Reginald
92-002148
Vieira, Joao Paes
92-003712
Vierke, Jorg
92-002252
Vijverberg, J.
92-003626
Vik, Eilen Arctander
92-003322
Viljanen, M.
92-002886
Villani, P.
92-002097
Vindimian, Eric
92-003443
Vinnikov, A. B.
92-003009
Vinnikov, A. V.
92-003713
Vinyard, Gary
92-003795
Viola, S.
92-002226
Viola, Shlomoh
92-002227
Virtanen, M.
92-003606
Vittozzi, Luciano
92-003389
Vlink, Bauke
92-002815
Vogelbein, Wolfgang K.
92-003442
Vogt, Richard J.
92-003136
Voigt, Heinz-Rudolf
92-003323
Voiland, Michael P., Jr.
92-003763
Volkl, Alfred
92-003327
Vollestad, Leif Asbjorn
92-003047
Vondracek, Bruce
92-002983
Vooren, Carolus Maria
92-002939
Vose, F. E.
92-003746
Voskoboynikova, O. S.
92-002397
Vranovsky, M.
92-003683
Vrijenhoek, Robert C.
92-002750

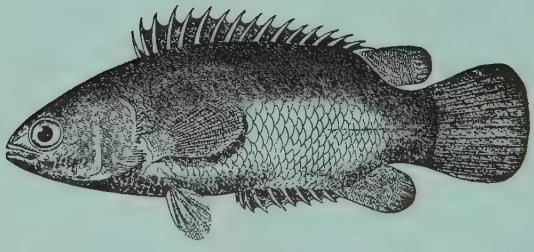
...CONTINUED...
Vrijenhoek, Robert C.
92-003012
Vronskii, B. B.
92-002948
Vukovich, T.
92-002341
Vuorinen, Marja
92-003324
92-003444
Vuorinen, Pekka J.
92-003324
92-003444
Vustyanyuk, A. V.
92-002949
Waardenburg, H. W.
92-003730
Wachtel, S. S.
92-002636
Wagner, G. P.
92-002765
Wagner, Graham F.
92-002371
Wagner, Hans-Joachim
92-002339
Wahli, T.
92-003193
Wainwright, Peter C.
92-002834
Wakabayashi, H.
92-003166
Wakabayashi, Hisatsugu
92-003138
Walker, D. I.
92-002310
Walker, Mary K.
92-003445
Walker, W. W.
92-003377
92-003446
Walline, P. D.
92-003630
Walls, Jerry G.
92-003092
92-003167
Waltemyer, David L.
92-002918
92-002919
Walter, Gunther
92-003194
Walton, William E.
92-002859
Wang, B. X.
92-002877
Wang, D. S.
92-002398
Wang, S. W.
92-002651
Wang, Yei-Shung
92-003447
Wangaard, David B.
92-002299
Wanzenbock, Josef
92-002860
Waples, Robin S.
92-002766
Warburton, K.
92-002782
Ward, David L.
92-003684
Ward, F. J.
92-003011
Ware, D. M.
92-003008
Warner, Robert R.
92-002585

...CONTINUED...
Warner, Robert R.
92-002942
Washuta, Edmund J.
92-003273
Wassermann, O.
92-003396
Watanabe, Mayumi
92-002958
Watanabe, Wade O.
92-002149
92-002150
92-003269
Waterstrat, P. R.
92-003168
Watson, John W.
92-003778
Watt, P. W.
92-002652
Watten, Barnaby J.
92-002189
92-002277
Wauchope, R. D.
92-003448
Wawrzyniak, Wawrzyniec
92-003121
Weatherley, A. H.
92-003524
Weatherley, N. S.
92-002313
Weaver, Dallas E.
92-002300
Webb, Mark A.
92-003516
Webb, Paul W.
92-002861
Webber, E. Cliff
92-003325
92-003534
Weber, Greg M.
92-002599
Weber, Gregory M.
92-002653
Webster, Carl D.
92-002220
92-002221
92-002228
92-002229
Webster, Joseph
92-002043
Wedemeyer, Gary A.
92-002488
Weeks, Hutchie
92-002911
Weeks, Stephen C.
92-003012
Weilding, G.
92-003697
Weirich, C. R.
92-003449
Weirowski, F.
92-003116
Weisberg, Stephen B.
92-003484
Welcomme, R. L.
92-003561
Wellborn, Gary A.
92-003013
Welling, W.
92-003450
Wells, John
92-003057
Wendelaar Bonga, S. E.
92-002491
Wenzel, A.
92-003409
Wernerus, Francois M.
92-002950
Wesche, Thomas A.
92-002927
Wesson, L. J.
92-003451
West, Corlis W.
92-003274
Westbrook, Donna J.
92-003442
Westerman, Philip W.
92-002301
Wetherbee, Bradley M.
92-002654
Wetterer, James K.
92-002859
Wetzel, J.
92-002951
Wetzel, Richard L.
92-003623
Wetzlich, Scott
92-003399
Whalen, R.
92-002655
Wheaton, Fred
92-002305
Wheaton, Fred W.
92-002302
Whitaker, D. J.
92-003195
White, M. R.
92-002177
Whiteside, M. C.
92-002318
Whitson, John
92-002286
92-002303
Whittington, I. D.
92-003270
Whittington, Ian D.
92-003232
Whoriskey, F. G.
92-002071
92-003531
Whoriskey, F. G., Jr.
92-002954
Whyte, J. N. C.
92-002201
Wicklund, Robert I.
92-002150
92-003269
Wiedmeyer, Raymond H.
92-003346
Wierzbicka, Jadwiga
92-003122
92-003196
Wieser, Wolfgang
92-002528
92-002607
92-002656
92-002812
92-002848
92-002862
92-003470
Wilcock, John A.
92-003495
Wilcox, D.
92-003483
Wilkerling, Klaus
92-002887
Williams, Cynthia Deacon
92-003786
92-003799
Williams, Daniel J.
92-003169

Williams, Ernest H., Jr.
92-003123
92-003271
Williams, Jack E.
92-003471
92-003793
Williams, James D.
92-002684
Williams, K. J.
92-003291
Williams, R.
92-003079
Williams, Roy O.
92-003086
Williams, Woodie P.
92-002182
Willig, Michael R.
92-003770
Willis, David W.
92-003631
Willis, Scott A.
92-003562
Willox, Campbell C.
92-003537
Wilmot, Richard L.
92-002299
Wilson, Allan C.
92-002739
Wilson, Harold T.
92-003484
Wilson, R.
92-002657
Wimberger, Peter Hans
92-002767
Wimo, Jorgen
92-002253
Winberg, Svante
92-002658
Winfield, Denise K.
92-002863
Winfield, Ian J.
92-002863
Wing, John F.
92-003014
Wingate, Paul J.
92-003563
Wingfield, W. H.
92-003200
Winkler, Hans
92-002864
Winnicki, Aleksander
92-002268
Winter, B. D.
92-003493
Winter, E. L.
92-002659
Wintersberger, H.
92-003676
Winton, J. R.
92-003202
Wise, D. J.
92-003170
Wisner, Brian B.
92-002230
Wittbrodt, Joachim
92-002706
Wohlgemuth, Evzen
92-003432
Woiwode, John G.
92-002304
Wolke, R. E.
92-003224
Wolowyk, Michael W.
92-002544
Woo, Patrick T. K.
92-003180

...CONTINUED...
Woo, Patrick T. K.
92-003197
Wood, C. M.
92-002604
Wood, Chris M.
92-002564
Wood, N. J.
92-002652
Wood, Robert M.
92-003072
Woods, L. Curry III
92-002626
92-002634
Woolington, James D.
92-002920
Wooster, G. A.
92-002429
Work, Therese
92-003754
Workman, Ian K.
92-003778
Wortman, Brian
92-002305
Wourms, J. P.
92-002365
92-002368
92-002529
92-002951
92-002952
Woynarovich, E.
92-003494
Wright, D. B.
92-002399
Wright, Glenda M.
92-002591
Wright, Terry E.
92-002306
Wu Yun-Fei
92-003073
Wu, E. H.
92-002400
Wu, Lin
92-003015
92-003648
Wu, Q. J.
92-002768
Wulff, J. L.
92-003016
Wurtsbaugh, Wayne A.
92-003702
Wydoski, Richard S.
92-002488
92-003800
Wynne, M. Bennett
92-003521
Xiao, Ju
92-003294
Ximenes Carneiro, Antonio Romildo
92-002231
Xiong, Fei
92-002660
Yakupitiyage, Amararatne
92-003571
Yamada, M.
92-002661
Yamagami, Kenjiro
92-002566
92-002664
Yamamoto, Shin-ichi
92-002567
Yamamoto, T. S.
92-002662
Yamasaki, Shigehisa
92-002167
Yamashita, Michiaki
92-002663

Yamauchi, Kohei
92-002558
Yamazaki, Takayoshi
92-003205
92-003206
Yamazaki, Tomoaki
92-002518
Yancey, Daniel H.
92-002229
Yang, Jui-Sen
92-003751
Yang, Sang Geun
92-002152
Yano, T.
92-003171
Yano, Tomoki
92-003149
Yarzhombek, A. A.
92-003452
Yasui, S.
92-002661
Yasumasu, Shigeki
92-002664
Yates, Terry L.
92-002692
Ye, Y. Z.
92-002768
Yeakel, A.
92-002696
Yedema, Eddy
92-003353
Yegorov, S. N.
92-002570
Yeh, Ruth Yu-Li
92-003661
Yi, Zhen
92-002198
Yonekura, Hiroyuki
92-003138
Yoshida, Makoto
92-003384
Yoshinaka, Reiji
92-002559
Yoshioka, Motoi
92-002794
Yoshizaki, Goro
92-002769
Young-Dubovsky, Constance H.
92-002211
Young, J. A.
92-002307
Young, James D.
92-002544
Young, W. J.
92-003685
Younghans-Haug, C.
92-003348
Youngs, William D.
92-002108
Youson, John H.
92-002371
Yu, S.-Y.
92-003045
Yuen, R.
92-002588
Yuferova, S. G.
92-003297
Yus, E.
92-003211
Zaitsev, V. F.
92-002570
Zajicek, James L.
92-003285
Zalewski, M.
92-003686
Zamarro, Javier
92-002953
Zamorano, Ricardo Mendez
92-002110
Zanuy, S.
92-002406
Zanuy, Silvia
92-002433
Zaporozhets, O. M.
92-002665
Zaprudnova, R. A.
92-002666
Zarbalina, T. S.
92-002902
Zdanovich, V. V.
92-002530
Zebuhr, Yngve
92-003340
Zehren, S. J.
92-002770
Zelazny, J.
92-003255
Zeno, Todd
92-003356
Zerunian, Sergio
92-003095
92-003111
Zhang, Y. G.
92-002398
Zhang, Z.
92-002401
92-002667
92-002668
Zhao Tie-Qiao
92-003112
Zhdanova, A. N.
92-003452
Zhu, L. F.
92-002771
Zhu, Yong
92-002865
Zhu, Z.
92-002688
Zigman, Seymour
92-002351
Ziper, Craig
92-003433
Zitko, V.
92-003326
Zivkovic, J.
92-003141
Zoccarato, I.
92-002097
Zok, S.
92-003453
Zubin, A. A.
92-002715
Zupanc, G. K. H.
92-002669
Zusmanovith, Ofer
92-002143



Africa
92-003553
Africa, Northern
92-003047
92-003469
Africa, Southern
92-003743
92-003773
Africa, Western
92-003723
Africa: Lake Tanganyika
92-003639
Africa: Lake Victoria
92-003545
Alabama
92-002358
92-002819
92-003271
92-003325
92-003534
92-003691
Alabama: Coosa River
92-002394
92-003106
Alabama: Tallapoosa River
92-003106
Alabama: Walter F. George Reservoir
92-003256
Alabama: Weiss Reservoir
92-002913
Alaska, Coastal
92-002928
Alaska, Southeastern
92-003652
Alaska: Aleutian Islands
92-003507
Alaska: Auke Bay
92-003000
Alaska: Bering River
92-003499
Alaska: Bristol Bay
92-002892
92-002920
Alaska: Chignik River
92-003496
Alaska: Chilkat Lake
92-003652
Alaska: Chilkoot Lake
92-003652
Alaska: Cook Inlet
92-002899
92-002900
92-002918
92-002919
Alaska: Copper River
92-003499
Alaska: Kenai River
92-002919
Alaska: Prince of Wales Island
92-003475
Alaska: Prince William Sound
92-003495
92-003499
Alaska: Shelikof Strait
92-002882
Alaska: Toolik Lake
92-003637
Albania
92-003048
Antarctica
92-002756
92-002881
92-002994

...CONTINUED...
Antarctica
92-003079
Arabian Sea and Area
92-003275
Arctic Ocean
92-003290
Argentina
92-002409
92-002432
92-003252
92-003574
Arkansas
92-002684
Arkansas: Beaver Reservoir
92-003767
Arkansas: Ozark Plateau
92-003650
Arkansas: White River
92-002896
Asia
92-003538
Asia, Southeastern
92-003128
Atlantic Ocean
92-003058
92-003438
92-003712
92-003723
Atlantic Ocean, North
92-002338
92-002682
92-002742
92-002843
92-002878
92-002903
92-002907
92-002953
92-002969
92-003003
92-003036
92-003080
92-003086
92-003122
92-003293
92-003298
92-003482
92-003492
92-003500
92-003578
92-003579
92-003732
92-003738
92-003739
92-003741
92-003742
92-003744
Atlantic Ocean, North: Flemish Cap
92-003223
Atlantic Ocean, North: Middle Atlantic Bight
92-002943
Atlantic Ocean, North: New York Bight
92-002904
Atlantic Ocean, North: Rockall Trough
92-003052
Atlantic Ocean, North: Scotian Shelf
92-002850
Atlantic Ocean, South
92-002939
92-002956
92-003110
92-003743
92-003773
Australia
92-003529

...CONTINUED...
Australia
92-003595
92-003601
Australia: Albert River
92-002885
Australia: Barambah Creek
92-003671
Australia: Gulf of Carpentaria
92-003005
Australia: Logan River
92-002885
Australia: New South Wales
92-003254
92-003731
Australia: Queensland
92-002782
92-002885
92-003005
92-003270
92-003307
92-003671
Australia: River Dee
92-003307
Australia: South Australia
92-002923
92-003097
Australia: Tasmania
92-002084
92-002269
92-002923
92-003097
Australia: Victoria
92-003097
Australia: Western Australia
92-002310
92-003054
92-003082
92-003536
Austria
92-002083
92-002675
92-003556
92-003632
92-003649
92-003676
92-003788
Austria: Lake Attersee
92-003238
92-003239
Austria: Lake Constance
92-002929
Azores Islands
92-003405
Baltic Sea and Area
92-002094
92-002098
92-002153
92-002161
92-002714
92-002730
92-002937
92-003121
92-003169
92-003315
92-003316
92-003323
92-003340
Bangladesh
92-003108
Barbados
92-002915
92-002930
Barents Sea
92-002153

...CONTINUED...
Barents Sea
92-003036
92-003196
Belize: Twin Cays
92-002856
Bering Sea
92-002981
92-003099
92-003564
Black Sea and Area
92-002066
92-002153
92-002949
Bolivia: Lake Tumi Chucua
92-003107
Brazil
92-002784
92-002939
92-003102
92-003105
92-003240
92-003267
Brazil: Paraguay River
92-002686
Brazil: Parana River
92-002686
Brazil: Patos Lagoon
92-003712
Brazil: Rio Doce
92-003070
Brazil: Tres Marias Reservoir
92-003220
92-003226
Brunei
92-003093
California
92-002063
92-002073
92-003348
92-003539
92-003678
92-003793
California, Coastal
92-002250
92-002311
92-002888
92-002933
92-002962
92-003032
92-003546
92-003734
California: Death Valley Natl. Monument
92-002699
California: Eel River
92-002957
92-003681
California: Merced River
92-003310
California: Mission Bay
92-002876
California: Monterey Bay
92-003246
California: Noyo River
92-002080
California: San Diego Bay
92-002876
California: San Joaquin Valley
92-003310
California: Santa Cruz Island
92-002802
California: Sierra Nevada
92-003026
California: Tomales Bay
92-002942

...CONTINUED...
California: Tomales Bay
92-003246
Canada
92-002067
92-003118
92-003455
92-003461
92-003466
92-003533
92-003548
92-003735
Canada: Alberta
92-003624
Canada: Arctic
92-003014
Canada: Bay of Fundy
92-002718
92-002906
92-003503
Canada: British Columbia
92-002103
92-002917
92-002921
92-002928
92-002959
92-003008
92-003195
92-003662
Canada: Conception Bay
92-003311
Canada: Dauphin Lake
92-003120
92-003263
92-003264
Canada: Fraser River
92-002921
Canada: Hecate Strait
92-002917
Canada: Hudson Bay
92-003721
Canada: Keogh River
92-002959
Canada: Lac du Passage
92-002071
92-003531
Canada: Lake Manitou
92-003537
Canada: Lake Opeongo
92-003537
Canada: Lake Simcoe
92-003537
Canada: Mackenzie River and Basin
92-003659
Canada: Manitoba
92-003120
92-003263
92-003264
Canada: Medway River
92-003451
Canada: Miramichi River
92-003774
Canada: Misty Lake
92-002959
Canada: Mykiss Lake
92-002736
Canada: New Brunswick
92-002100
92-002701
92-002906
92-003225
92-003460
92-003774
Canada: Newfoundland
92-002100

...CONTINUED...
Canada: Newfoundland
92-002691
92-002854
92-002944
92-002964
92-003122
92-003196
92-003223
92-003311
92-003390
92-003776
Canada: Northeast River
92-003776
Canada: Northwest Territories
92-003659
Canada: Nova Scotia
92-002037
92-002100
92-002696
92-002701
92-002843
92-002906
92-003003
92-003451
92-003491
92-003668
Canada: Ontario
92-002099
92-002703
92-003180
92-003537
92-003666
92-003763
Canada: Placentia River
92-002944
Canada: Pomquet Harbor
92-003491
Canada: Prince Edward Island
92-002127
Canada: Quebec
92-002071
92-002100
92-002954
92-003488
92-003531
92-003721
Canada: Restigouche River
92-003774
Canada: Roti Bay
92-002854
Canada: Salmon River
92-002954
Canada: Shubenacadie River
92-003668
Canada: St. John River
92-003225
Canada: St. Lawrence Seaway
92-002718
92-002754
92-003260
Canada: Vancouver Island
92-003008
Canada: Westfield River
92-003451
Canary Islands
92-003076
Caribbean Area
92-003016
92-003235
92-003304
92-003437
92-003438
92-003724

Caroline Islands
92-003091
Caspian Sea and Area
92-002066
92-002153
92-002902
Chile
92-002061
92-002110
92-002764
92-002925
92-003104
92-003115
92-003119
92-003165
92-003172
92-003266
92-003352
China: Gansu Province
92-003112
China: Qinghai Province
92-003073
China: Shiyang River
92-003112
China: Shule River
92-003112
Colombia: Meta River
92-002348
Colorado
92-003798
92-003800
Colorado: Green River
92-003519
Colorado: Purgatoire River
92-003655
Cuba
92-002034
92-002867
Czechoslovakia
92-003683
Czechoslovakia: Jihlava River
92-003486
Czechoslovakia: Macha Lake
92-003215
Czechoslovakia: Musov Reservoir
92-003038
92-003698
Czechoslovakia: Svratka River
92-002501
Delaware: Delaware Bay
92-002979
92-002980
92-003273
Egypt
92-002977
England
92-003063
92-003651
England: Bristol Channel
92-002897
England: Great Ouse River
92-003657
England: River Brett
92-002889
England: River Chelmer
92-002889
England: River Clyst
92-003247
England: River Colne
92-003485
England: Roadford Reservoir
92-003695
92-003697
Europe
92-002101
92-002860
92-002862
92-002869
92-003047
92-003385
92-003470
92-003543
92-003561
Europe: Danube River and Basin
92-002675
92-003074
92-003487
92-003676
92-003683
92-003692
Europe: Iberian Peninsula
92-002992
Europe: Rhine River and Basin
92-003327
92-003665
Faeroe Islands
92-003131
Falkland Islands
92-002322
Fiji Islands
92-003109
Finland
92-002098
92-002222
92-002914
92-002932
92-003056
92-003314
92-003315
92-003321
92-003324
92-003555
92-003566
92-003584
92-003634
92-003644
92-003645
92-003663
92-003688
Finland: Gulf of Bothnia
92-003218
92-003323
Finland: Gulf of Finland
92-003582
Finland: Lake Inari
92-003581
Finland: Lake Pyhajarvi
92-002846
Finland: Lake Vesijarvi
92-003641
Florida
92-002926
92-003025
92-003257
92-003271
92-003482
92-003562
92-003746
Florida, Coastal
92-003282
92-003416
92-003732
Florida, Southeastern
92-003797
Florida, Southwestern
92-003489

Florida: Anclote River Estuary
92-003710
Florida: Apalachicola Bay
92-003599
Florida: Blackwater Bay
92-002936
Florida: Florida Bay
92-003525
Florida: Indian River Lagoon
92-003373
France
92-002912
92-002950
France: Bay of Biscay
92-003706
France: Herault River
92-002731
France: Loire River
92-003706
France: Mauguio Lagoon
92-002873
France: Nive River
92-003585
France: Oir River
92-002777
France: Rhone River
92-002785
92-003656
France: River Ain
92-002778
France: River Durance
92-003443
France: River Seine
92-003670
French Polynesia
92-002796
Georgia
92-003025
92-003176
Georgia: Allatoona Reservoir
92-002901
Georgia: Coosa River
92-002394
92-003106
Georgia: Oconee Reservoir
92-002901
Georgia: Sapelo Island
92-003031
Georgia: Sinclair Reservoir
92-002901
Georgia: Tallapoosa River
92-003106
Germany
92-003219
92-003308
Germany: Elbe River
92-003245
92-003396
Germany: Lake Constance
92-002895
92-003040
Germany: Weser River
92-003708
Grand Banks
92-002953
Great Britain
92-003277
Great Lakes
92-003535
92-003597
Greece
92-002107
92-003035

...CONTINUED...
Greece
92-003643
Greece: Aegean Sea
92-003041
92-003237
Guatemala
92-002276
Guinea
92-003703
Gulf of Mexico
92-002819
92-002868
92-003059
92-003086
92-003510
92-003552
92-003589
92-003727
Hawaii
92-002781
92-002814
92-002999
92-003549
Hawaii: Hanalei River Estuary
92-003709
Hawaii: Kaneohe Bay
92-002837
92-002940
92-003711
Heard and McDonald Islands
92-003318
Hungary
92-003130
92-003328
Hungary: Lake Balaton
92-002779
92-003640
92-003642
92-003647
Iceland
92-002742
Iceland: Lake Thingvallavatn
92-002993
Idaho
92-003793
Idaho: Henry's Fork
92-002798
Idaho: Salmon River
92-003214
Illinois
92-003672
92-003689
India
92-003108
92-003186
92-003317
India: Vanivilasa Sagar Reservoir
92-003268
Indian Ocean
92-002881
92-003098
92-003508
Indiana
92-003312
Indiana: Stinking Fork
92-003006
Iowa
92-003483
Iowa: Rathbun Lake
92-002908
Ireland
92-002694
92-003259

Irish Sea
92-003301
92-003567
92-003577
92-003728
Israel
92-002052
92-003020
92-003051
Israel: Haifa Bay
92-002479
Israel: Lake Kinneret
92-003630
Israel: River Jordan
92-002479
Israel: Sea of Galilee
92-002479
Italy
92-002685
92-003095
92-003335
Italy: Lake Comabbio
92-003646
Ivory Coast
92-002114
Jamaica
92-002154
92-002955
92-003055
Japan
92-002062
92-002344
92-002855
92-002879
92-002946
92-003145
92-003157
92-003166
92-003173
92-003446
92-003601
92-003726
Japan: Chitose River
92-003191
Japan: Hokkaido
92-003113
92-003737
Japan: Kiso River
92-003044
Japan: Lake Ikeda
92-002945
Japan: Nagara River
92-003044
Japan: Shiotsuokawa River
92-002472
Japan: Tokyo Bay
92-003573
Japan: Tone River
92-003044
Kansas
92-002910
92-003690
Kansas: Marion Reservoir
92-002839
Kentucky: Kentucky Lake
92-003265
Kentucky: Mammoth Cave
92-002866
Korea
92-003129
92-003262
92-003572
Lake Erie
92-002983

...CONTINUED...
Lake Erie
92-003015
92-003648
Lake Michigan
92-003077
92-003274
92-003627
Lake Ontario
92-002717
92-002966
92-003402
92-003635
92-003763
Latin America
92-003780
Louisiana
92-003674
92-003675
Louisiana: Cross Bayou
92-003479
Macquarie Island
92-003318
Maine
92-002100
92-002701
92-003459
Maine: Gulf of Maine
92-002903
Maine: Narraguagus River
92-003774
Maine: Penobscot River
92-003774
Malawi: Lake Malawi
92-002823
Malaysia
92-003093
92-003188
Maryland
92-003480
Maryland, Coastal
92-003744
Maryland: Patuxent River
92-003484
92-003593
Massachusetts: Mashpee River
92-002678
Mediterranean Region
92-002383
92-002873
92-002950
92-002970
92-002996
92-003035
92-003041
92-003048
92-003049
92-003051
92-003141
92-003147
92-003335
92-003357
92-003618
Mexico
92-003462
92-003792
Mexico: Baja California Sur
92-003023
92-003037
Mexico: Chiapas
92-003783
Mexico: Gulf of California
92-003722
Mexico: Sonora
92-002750

Mexico: Tamaulipas
92-002674
Michigan
92-002834
Michigan: Ford River
92-002830
Michigan: Huron River
92-003772
Minnesota
92-003292
92-003306
92-003563
Minnesota: Hay Creek
92-003680
Minnesota: Lake Itasca
92-002318
Mississippi
92-002819
92-003027
Mississippi: Bayou Pierre
92-002874
Mississippi: Moon Lake
92-003280
Mississippi: Twentymile Creek
92-003677
Missouri
92-003285
Missouri: James River
92-003511
Missouri: Lake of the Ozarks
92-002890
Missouri: Pomme de Terre Lake
92-002890
92-003511
Missouri: Stockton Lake
92-002890
Missouri: Wappapello Lake
92-002890
92-003511
Morocco
92-003357
Namibia
92-002956
Nebraska
92-002931
92-003279
92-003478
Nepal
92-003108
Netherlands
92-002815
92-003192
92-003272
92-003626
92-003687
Netherlands: Lake Wolderijd
92-003517
Nevada, Northern
92-003669
Nevada: Ash Meadows
92-002699
92-003786
Nevada: Devil's Hole
92-003786
Nevada: Moapa River
92-002697
New Jersey
92-003087
New York
92-003498
92-003763
New York: Great South Bay
92-002924
New York: Hudson River
92-003284
New York: Lake Oneida
92-003629
New York: Long Island
92-003294
New York: New York Bight
92-002904
New Zealand
92-002654
92-002821
92-002872
92-003028
92-003064
92-003068
92-003094
92-003518
92-003540
92-003586
92-003729
92-003745
New Zealand: Heathcote River
92-003227
New Zealand: Rakaia River
92-002503
North America
92-002766
92-003096
92-003303
92-003490
92-003533
92-003538
92-003547
92-003781
92-003791
North America: Colorado River and Basin
92-003790
92-003798
92-003800
North America: Columbia River and Basin
92-002093
92-003159
92-003542
92-003662
North America: Rio Grande and Basin
92-002674
92-002692
North America: Rocky Mountain Region
92-002798
North Carolina
92-002474
92-003053
92-003072
92-003075
92-003185
92-003738
North Carolina: Cape Fear River
92-003661
North Carolina: Lake Wylie
92-002905
North Carolina: Roanoke River
92-003284
North Carolina: Shuler Creek
92-003521
North Dakota
92-002121
North Sea
92-002985
92-003192
92-003221
92-003272
92-003298
92-003300

...CONTINUED...
North Sea
92-003309
92-003319
92-003320
92-003322
92-003605
92-003719
92-003730
Northern Ireland
92-003457
Northern Ireland: Lough Neagh
92-002863
Norway
92-002081
92-002742
92-003137
92-003164
92-003209
92-003236
92-003330
92-003341
92-003565
92-003728
Norway: Lake Hoysjoen
92-003288
Norway: Lakselva River
92-003231
Oceanica
92-002738
92-003101
Ohio
92-002702
92-003305
Ohio: Clark Lake
92-002847
Ohio: Delaware Reservoir
92-002963
Oklahoma
92-002910
Oklahoma: Arkansas River
92-002911
Oklahoma: Cirrumpa Creek
92-003062
Oklahoma: Rainy Mountain Creek
92-003057
Oregon
92-003159
92-003662
92-003793
Oregon: Boulder Creek
92-003481
Oregon: Steamboat Creek
92-003481
Oregon: Willamette River
92-003684
Pacific Ocean
92-002386
92-003061
92-003501
92-003580
92-003614
Pacific Ocean, North
92-002311
92-002344
92-002713
92-002888
92-002893
92-002928
92-002933
92-002962
92-003008
92-003009
92-003250

...CONTINUED...
Pacific Ocean, North
92-003473
92-003546
92-003715
92-003726
92-003734
92-003735
92-003736
Pacific Ocean, South
92-003101
92-003241
92-003576
Pacific Ocean, South: Nazca Ridge
92-002349
92-003060
Pacific Ocean, South: Sala y Gomez Ridge
92-003060
92-003103
Pacific Ocean, Southeastern
92-003103
92-003104
Pacific Ocean, Southwestern
92-003091
92-003109
Pakistan
92-003108
Pennsylvania
92-003278
Pennsylvania: Bushkill Creek
92-003509
Pennsylvania: Fishing Creek
92-003033
92-003551
Pennsylvania: Spring Creek
92-002922
Pennsylvania: Susquehanna River
92-002751
Peru
92-002989
92-003241
Philippines
92-003608
Poland
92-003251
Poland: Konin Lakes
92-003694
Poland: Lubrzanka River
92-003686
Poland: Osowka River
92-003532
Poland: Tajty Lake
92-002971
Portugal
92-002079
92-002775
92-003177
Portugal: Mira Estuary
92-002967
Portugal: Ria de Aveiro
92-003018
Puerto Rico
92-003707
Red Sea and Area
92-002325
92-002884
Rhode Island
92-002321
Rhode Island: Bullhead Pond
92-002813
Rhode Island: Narragansett Bay
92-002799
Romania
92-003487

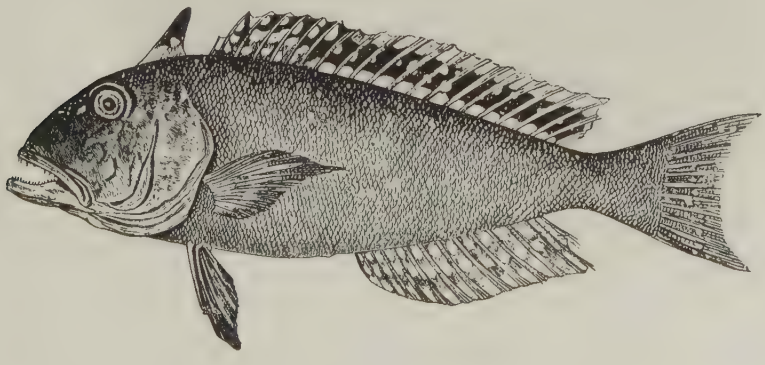
...CONTINUED...
Romania
92-003494
92-003692
Romania: Bicaz Reservoir
92-003699
Rwanda
92-002130
Scotland
92-002054
92-002091
92-002719
92-003002
92-003182
92-003728
Scotland: Aberdeenshire Dee
92-002961
Scotland: Firth of Clyde
92-003329
Scotland: Loch Fleet
92-003628
Scotland: River Almond
92-002995
Scotland: Spey River
92-002960
Sea of Japan
92-002726
92-002855
92-002958
92-003046
92-003737
Sea of Okhotsk
92-002726
92-003046
92-003099
92-003713
Sierra Leone
92-003058
Somalia
92-003740
South Africa
92-002082
92-002188
92-002762
South Africa: Florida Lake
92-003560
South America
92-002745
92-003538
South America: Amazon River and Basin
92-003240
92-003267
South Carolina
92-003003
92-003069
92-003072
South Carolina: Jocassee Reservoir
92-002975
South Carolina: Lake Wylie
92-002905
South Dakota: Lake Madison
92-003631
Spain
92-002033
92-002996
92-003211
92-003578
Spain: Esva River
92-002708
Spain: Narcea River
92-002708
Spain: Torrejon Reservoir
92-003696
Sri Lanka
92-002894

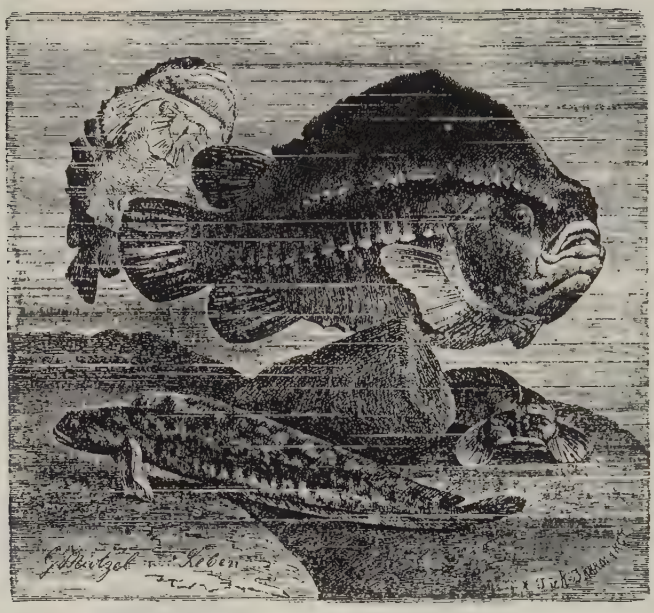
...CONTINUED...
Sri Lanka
92-003108
92-003608
Sweden
92-002169
92-003289
92-003316
92-003465
Sweden: Umealven River
92-002419
Switzerland: Lake Sempach
92-003088
Tennessee: Chickamauga Reservoir
92-003084
Tennessee: Coosa River
92-002394
92-003106
Tennessee: Kentucky Lake
92-003265
Texas
92-002674
92-003059
92-003552
92-003615
Texas, Coastal
92-003510
Texas: Eagle Mountain Lake
92-003575
Texas: Farfield Reservoir
92-003013
Texas: Lake Conroe
92-003083
Texas: Lake Meredith
92-003516
Texas: Lake Palestine
92-003516
Texas: Lake Whitney
92-003516
Texas: Matagorda Bay
92-003502
92-003505
Texas: Sister Grove Creek
92-003667
Texas: South Bay
92-003727
Thailand
92-003608
Trinidad and Tobago
92-003733
Turkey
92-003066
Turkey: Lake Egirdir
92-002973
U.S. Virgin Islands
92-002585
92-002988
92-003497
Union of Myanmar
92-003108
United Kingdom
92-003301
United Kingdom: Celtic Sea
92-002897
United States
92-002062
92-003461
92-003557
92-003563
92-003799
United States, Eastern
92-003609
92-003633
United States, Southeastern
92-002358

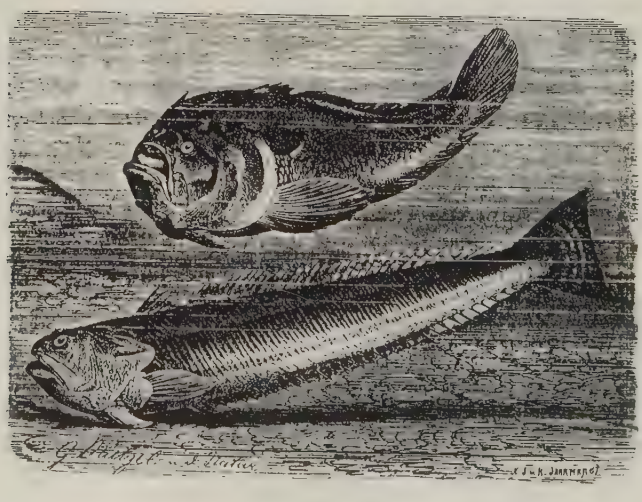
...CONTINUED...

United States, Southeastern
92-002673
92-003086
92-003705
United States, Southwestern
92-003471
United States, Western
92-002700
92-003462
92-003463
92-003541
92-003673
92-003787
92-003792
92-003795
United States: Chesapeake Bay
92-002909
92-002934
92-003284
92-003593
92-003623
92-003704
United States: Mississippi River and Basin
92-003483
92-003672
92-003674
92-003675
United States: Missouri River and Basin
92-003279
United States: New England
92-003500
United States: Ohio River and Basin
92-003065
United States: Pacific and Mountain States
92-002928
92-003542
92-003550
92-003715
USSR
92-002094
92-002153
92-002714
92-002746
92-002858
92-003243
92-003717
USSR: Atrek River
92-002941
USSR: Azerbaijan
92-002902
USSR: Chara River
92-002320
USSR: Dnieper Reservoir
92-003067
USSR: Dnieper River
92-003067
USSR: Dniester River
92-003074
USSR: Estonia
92-002094
USSR: Far Eastern Region
92-002711
92-002726
USSR: Kamchatka
92-002389
92-002948
92-003009
92-003019
USSR: Kamchatka River
92-002389
92-002948
USSR: Kirghiz
92-002384
USSR: Kuibyshev Reservoir
92-003228
USSR: Kura River
92-002902
USSR: Lake Baykal
92-002715
92-003636
USSR: Lena River
92-002320
USSR: Moscow River
92-002763
USSR: Pechora River
92-002875
USSR: RSFSR
92-002320
92-002666
92-002941
USSR: Rybinskoye Reservoir
92-002666
USSR: Sakhalin
92-002711
USSR: Shchugor River
92-002589
USSR: Ukraine
92-003299
USSR: Ural Region
92-002589
USSR: Uzbek
92-003343
USSR: Vakhsh River
92-003343
USSR: Volga River and Basin
92-002947
92-003089
USSR: Volgograd Reservoir
92-002509
USSR: White Sea
92-002938
92-003718
Utah
92-003798
92-003800
Utah: East Canyon Reservoir
92-003702
Utah: Flaming Gorge Reservoir
92-003700
Utah: Green River
92-003519
Utah: Lake Powell
92-002488
Utah: Mantua Reservoir
92-002488
Venezuela
92-003071
Virginia
92-002909
92-002934
92-003075
92-003693
Virginia: Craig Creek
92-002883
Virginia: Elizabeth River
92-003442
Virginia: Goose Creek
92-003682
Virginia: Roanoke River
92-002883
Virginia: York River
92-003712
Wales
92-002313
Washington
92-003793

Washington: Puget Sound
92-002550
Washington: Spada Lake
92-002968
Washington: Thorn Creek
92-003662
West Virginia: New River
92-002976
Wisconsin
92-003660
Wisconsin: Eau Galle Lake
92-003625
Wisconsin: Escanaba Lake
92-003512
Wisconsin: Fox River
92-003274
Wisconsin: Green Bay
92-003274
Wisconsin: Silver Lake
92-003216
Wisconsin: Tichigan Lake
92-003216
Wisconsin: Timber Coulee Creek
92-003513
Wyoming
92-003024
92-003798
92-003800
Wyoming: Douglas Creek
92-002927
Wyoming: Flaming Gorge Reservoir
92-003700
Wyoming: Green River
92-003519
92-003654
Wyoming: Hog Park Creek
92-003474
Wyoming: Little Snake River
92-003654
Wyoming: Medicine Bow Natl. Forest
92-002927
92-003664
Wyoming: Yellowstone Natl. Park
92-003504
Yugoslavia
92-002370
92-002685
92-002997
Yugoslavia: Neretva River
92-002341







Abramis ballerus
Age/Growth
92-002519
Bioenergetics
92-002519
Early Development
92-002519
Food Conversion Efficiency
92-002519
Food Supply
92-002519
Foods/Feeding
92-002519
92-002860
Larval Behavior
92-002860
Predator/Prey Relationships
92-002860
Abramis brama
Abundance/Factors of
92-002815
92-003694
Acidification
92-003314
Age/Growth
92-003596
Biosorption
92-003308
Branchial Basket
92-002395
Competition
92-002779
92-002815
Cooling Reservoirs
92-003694
Distribution/Factors of
92-002815
Early Development
92-002332
Exploitation Rates
92-003694
Food Supply
92-003647
Foods/Feeding
92-002779
92-002857
92-002864
92-003596
Gill Rakers
92-002395
Interspecies Relationships
92-002779
Ion Transport
92-002666
Management/Research--Lakes
92-003647
Management/Research--Reservoirs
92-003694
Musculature
92-002666
Osteology
92-002332
Polychlorinated Biphenyls
92-003308
Potassium
92-002666
Predator/Prey Relationships
92-002815
92-002857
92-002864
Sense Organs
92-002350
Sodium
92-002666

...CONTINUED...
Abramis brama
Stress
92-002666
Taste Reception
92-002350
Trophic Relationships
92-003647
Urban Runoff
92-003308
Zooplankton
92-003596
Abudefduf abdominalis
Abundance/Factors of
92-003711
Freshwater Inflow
92-003711
Management/Research--Estuaries
92-003711
Nursery Areas
92-003711
Recruitment
92-003711
Trophic Relationships
92-003711
Acanthoclinus fuscus
Competition
92-002821
Dominance
92-002821
Microhabitat
92-002821
Niche Overlaps
92-002821
Territorial Behavior
92-002821
Acanthophthalmus agmus
New Species
92-003093
Acanthophthalmus kuhli
Taxonomy
92-003093
Acanthophthalmus semicinctus
Cytology
92-002594
Epidermis
92-002594
Healing
92-002594
Acanthostracion
Haliotrema
92-003235
Parasites/Diseases
92-003235
Trematodes
92-003235
Acanthuridae
Culture/Propagation
92-002154
Foods/Feeding
92-002154
Site Suitability
92-002154
Acanthurus bahianus
Ciguatera
92-002988
Public Health Problems
92-002988
Trophic Relationships
92-002988
Acanthurus chirurgus
Ciguatera
92-002988
Public Health Problems
92-002988

...CONTINUED...
Acanthurus chirurgus
Trophic Relationships
92-002988
Acanthurus coeruleus
Ciguatera
92-002988
Public Health Problems
92-002988
Trophic Relationships
92-002988
Acanthurus triostegus
Coloration
92-002803
Death Feigning
92-002803
Acestrorhynchus lacustris
Nematodes
92-003226
Parasites/Diseases
92-003226
Travassosnema
92-003226
Acipenser
Early Development
92-002345
Evolution
92-002345
Jaws
92-002345
Acipenser baeri
Genetic Markers
92-002536
Isozymes
92-002536
Malate Dehydrogenase
92-002536
Variation Studies
92-002536
Acipenser gueldenstaedti
Age/Growth
92-002530
Bioenergetics
92-002530
Culture/Propagation
92-002215
Evolution
92-002601
Feeding Experiments
92-002215
Genetic Markers
92-002723
Hormones
92-002601
Hypothalamic-Hypophysial System
92-002601
Population Genetics
92-002723
Temperature
92-002530
Acipenser gueldenstaedti persicus
Maturation
92-002509
Reproductive Cycle
92-002509
Acipenser nudiventris
Migration
92-002902
Population Studies
92-002902
Spawning
92-002902
Acipenser ruthenus
Culture/Propagation
92-002184
...CONTINUED...
Acipenser ruthenus
Digestive System
92-002537
Enzymes
92-002537
Feeding Experiments
92-002184
Genetic Markers
92-002536
Hybridization
92-002184
Isozymes
92-002536
Malate Dehydrogenase
92-002536
Variation Studies
92-002536
Acipenser stellatus
Abundance/Factors of
92-003089
Age/Growth
92-003017
Cobalt
92-003017
Culture/Propagation
92-002215
92-003017
Evolution
92-002601
Feeding Experiments
92-002215
Flow Regimes
92-002947
92-003089
Growth Stimulants
92-003017
Habitat Alterations
92-002947
92-003089
Hormones
92-002601
Hypothalamic-Hypophysial System
92-002601
Impoundment
92-003089
Life History/General
92-002947
Management/Research--Rivers and Streams
92-003089
Manganese
92-003017
Recruitment
92-003089
Reproduction
92-002947
Acipenser transmontanus
Carbohydrate Metabolism
92-002473
Embryology
92-002333
Evolution
92-002555
92-002724
Proteins
92-002555
RNA
92-002724
Acipenseridae
Culture/Propagation
92-002118
Management/Research--General
92-002118

Alburnus alburnus
Abundance/Factors of
92-002785
Age/Growth
92-002519
Bioenergetics
92-002519
Early Development
92-002332
92-002519
Food Conversion Efficiency
92-002519
Food Supply
92-002519
Foods/Feeding
92-002519
92-002860
92-002971
Larval Behavior
92-002860
Management/Research--Rivers and Streams
92-002785
Microhabitat
92-002785
Nursery Areas
92-002785
Osteology
92-002332
Predator/Prey Relationships
92-002860
Sense Organs
92-002350
Taste Reception
92-002350
Aldrichetta forsteri
Marking/Tagging
92-003536
Otoliths
92-003536
Stock Identification
92-003536
Alosa aestivalis
Foods/Feeding
92-002975
Management/Research--Reservoirs
92-002975
Predator Introductions
92-002975
Stocking/Introductions
92-002975
Trophic Relationships
92-002975
Alosa chrysochloris
Management/Research--Rivers and Streams
92-002911
Population Studies
92-002911
Alosa pseudoharengus
Distribution/Factors of
92-002966
Food Supply
92-002966
Management/Research--Lakes
92-002966
Movements
92-002966
Trophic Relationships
92-002966
Zooplankton
92-002966
Alosa sapidissima
Embryology
92-002388

...CONTINUED...
Alosa sapidissima
Life History/General
92-002388
Ambloplites rupestris
Antigens
92-003248
Electrophoresis
92-003248
Immune Response
92-003248
Parasites/Diseases
92-003248
Parasitic Molluscs
92-003248
Villosa iris
92-003248
Amblyopsis spelaea
Caves
92-002866
Life History/General
92-002866
Ameca
Embryology
92-002529
Enzymes
92-002529
Ameca splendens
Disease Susceptibility
92-002690
Genetic Strains
92-002690
Ichthyophthirius multifiliis
92-002690
Parasites/Diseases
92-002690
Protozoan Diseases
92-002690
Amia calva
Air Breathing
92-002497
Corpuscle of Stannius
92-002371
Cytology
92-002371
Endocrinology
92-002414
Evolution
92-002716
Hormones
92-002414
Leeches
92-003180
Metabolism
92-002414
Parasites/Diseases
92-003180
Protozoan Diseases
92-003180
Respiration
92-002497
Thyroid Gland
92-002414
Trypanosoma catostomi
92-003180
Ammocrypta meridiana
Habitat Evaluation
92-003677
Management/Research--Rivers and Streams
92-003677
Ammodytes
Early Development
92-003721

...CONTINUED...
Ammodytes
Larvae
92-003721
Management/Research--Marine
92-003721
Predator/Prey Relationships
92-003721
Recruitment
92-003721
Survival
92-003721
Amphiprion melanopus
Maturation
92-002610
Sex Reversal
92-002610
92-002797
Anabas testudineus
Bioaccumulation
92-003439
Detoxification
92-003345
Heavy Metals
92-003439
Lead
92-003439
Lipid Content
92-003439
Piscicides
92-003345
Rotenone
92-003345
Thyroid Gland
92-003345
Thyroxine
92-003345
Xenobiotics
92-003345
Anarhichas lupus marisalbi
Gonosomatic Index
92-002938
Reproduction
92-002938
Sperm
92-002938
Anchoa mitchilli
Bays
92-002924
Fecundity
92-002934
Food Supply
92-002924
Gonosomatic Index
92-002934
Life History/General
92-002924
Management/Research--Marine
92-002924
Nursery Areas
92-002924
Recruitment
92-002924
Reproductive Cycle
92-002934
Seagrass Beds
92-002924
Spawning
92-002934
Temperature
92-002924
Ancistrus
Acoustico-Lateralis System
92-002329

...CONTINUED...
Ancistrus
Histology
92-002329
Lateral Line System
92-002329
Nervous System
92-002329
Andriashevia aptera
Meristic Studies
92-002344
Morphometry
92-002344
Species Identification
92-002344
Anguilla anguilla
Age/Growth
92-002285
92-002889
92-003047
Aggressive Behavior
92-002285
Anguillicola crassus
92-003222
92-003230
92-003245
Antigens
92-003222
Bacterial Diseases
92-003121
92-003164
Biosorption
92-003308
Calcium
92-002491
Climate
92-003047
Corpuscle of Stannius
92-002491
Cresols
92-003327
Culture/Propagation
92-002285
Cytology
92-003327
Diagnostic Techniques
92-003121
Edwardsiella tarda
92-003164
Fatty Acids
92-002405
Fish Kills
92-003327
Foods/Feeding
92-002889
Hatchery/Wild Populations
92-002405
92-002426
Hematology
92-002608
Histology
92-003327
Immune Response
92-003222
Lesions
92-003164
Life History/General
92-002869
Lindane
92-003406
Lipid Content
92-002405
92-002426
Liver
92-002608

...CONTINUED...
Anguilla anguilla
Management/Research--General
92-002869
Marking/Tagging
92-003522
Maturation
92-003047
Metabolic Rates
92-002562
Metamorphosis
92-003047
Musculature
92-002426
92-002608
Nematodes
92-003222
92-003230
92-003245
Osmoregulation
92-002491
Otoliths
92-002364
Parasites/Diseases
92-003121
92-003164
92-003222
92-003230
92-003245
92-003247
92-003327
Pesticides
92-003406
Photoperiodism
92-002285
Phyllodistomum folium
92-003247
Pollution
92-003121
92-003327
Polychlorinated Biphenyls
92-003308
Population Studies
92-002889
Pressure Effects
92-002608
Pseudoterranova decipiens
92-003245
Rearing Density
92-002285
Salinity
92-002491
Swimbladder
92-002582
Temperature
92-002562
92-003406
Trematodes
92-003247
Ulcers
92-003121
Urban Runoff
92-003308
Anguilla japonica
Bacterial Diseases
92-003138
Diagnostic Techniques
92-003138
Edwardsiella tarda
92-003138
Growth Hormone
92-002561
Herbicides
92-003447

...CONTINUED...
Anguilla japonica
Liver
92-002561
Musculature
92-002402
Parasites/Diseases
92-003138
pH Regulation
92-002402
Temperature
92-002402
Anguilla rostrata
Leeches
92-003180
Parasites/Diseases
92-003180
Protozoan Diseases
92-003180
Trypanosoma catostomi
92-003180
Anguillidae
Competition
92-003518
Fish Control/Removal
92-003518
Antigonia
Osteology
92-002770
Taxonomy
92-002770
Variation Studies
92-002770
Apistogramma
Aquariums
92-002252
Culture/Propagation
92-002252
Social Behavior
92-002252
Apistogramma cacatuoides
Life History/General
92-002887
Apteronotus
Electric Organs
92-002612
Apteronotus leptorhynchus
Adrenaline
92-002603
Brain
92-002603
Catecholamines
92-002603
Argyropelecus affinis
Eyes
92-002456
Pigments
92-002456
Argyropelecus hemigymnus
Bioluminescence
92-002549
Glucose
92-002549
Mate Selection
92-003600
Movements
92-003600
Olfaction
92-003600
Pyruvate
92-002549
Argyropelecus sladeni
Eyes
92-002456

...CONTINUED...
Argyropelecus sladeni
Pigments
92-002456
Ariidae
Age/Growth
92-003025
Otoliths
92-003025
Paleontology
92-003025
Aristichthys nobilis
Culture/Propagation
92-002200
Cytology
92-002200
Diets
92-002200
Early Development
92-002200
Herbicides
92-003447
Larvae
92-002200
Liver
92-002200
Nutrition
92-002200
Arius australis
Age/Growth
92-002885
Habitat Selection
92-002885
Nursery Areas
92-002885
Recruitment
92-002885
Aseraggodes macleayanus
Age/Growth
92-002885
Habitat Selection
92-002885
Nursery Areas
92-002885
Recruitment
92-002885
Aspitrigla cuculus
Foods/Feeding
92-002996
Asterropteryx semipunctatus
Bays
92-002940
Nursery Areas
92-002940
Reproduction
92-002940
Astronotus ocellatus
Foods/Feeding
92-002784
Management/Research--General
92-002784
Mosquito Control
92-002784
Predator/Prey Relationships
92-002784
Vector Control
92-002784
Atherina boyeri caspia
Distribution/Vertical
92-002941
Length-Weight Relationships
92-002941
Maturation
92-002941

...CONTINUED...
Atherina boyeri caspia
Reproductive System
92-002941
Spawning Migration
92-002941
Atherinops affinis
Age/Growth
92-002160
Culture/Propagation
92-002160
Fenvalerate
92-003370
Insecticides
92-003370
Laboratory Spawning
92-002160
Pesticides
92-003379
Pyrethroids
92-003370
Toxicity Testing
92-003379
Atractoscion nobilis
Culture/Propagation
92-003546
Larvae
92-003546
Supplemental Stocking
92-003546
Aulonocara
Albinism
92-002377
Austrofundulus limnaeus
Distribution/Geographical
92-003071
Habitat Selection
92-003071
Population Studies
92-003071
Balistes capriscus
Foods/Feeding
92-003004
Predator/Prey Relationships
92-003004
Balitoridae
Taxonomy
92-003100
Barbus barbus
Abundance/Factors of
92-003486
Biological Indicators
92-003676
Biological Monitoring
92-003443
Cytochrome P450
92-003443
Diplozoon gracile
92-002731
Disease Susceptibility
92-002731
Evolution
92-002731
Habitat Alterations
92-003486
Habitat Evaluation
92-003676
Hybridization
92-002731
Hydroelectric Developments
92-003486
Impoundment
92-003486
Industrial Wastes
92-003443

...CONTINUED...
Barbus barbus
Management/Research--Rivers and Streams
92-003486
92-003676
Markewitschiana triaxonis
92-003243
Parasites/Diseases
92-002731
92-003243
Trematodes
92-002731
92-003243
Barbus barbus bocagei
Abundance/Factors of
92-003696
Foods/Feeding
92-002992
Stock Assessment
92-003696
Barbus conchonius
Cadmium
92-003367
Heavy Metals
92-003367
Barbus kimberleyensis
Fertilization
92-002647
Sperm
92-002647
Barbus meridionalis
Diplozoon gracile
92-002731
Disease Susceptibility
92-002731
Evolution
92-002731
Hybridization
92-002731
Parasites/Diseases
92-002731
Trematodes
92-002731
Barbus plebejus euboicus
Diplozoon bileki
92-003237
Parasites/Diseases
92-003237
Trematodes
92-003237
Basilichthys australis
Karyotypes
92-002707
Limnoderetrema tolosai
92-003266
Parasites/Diseases
92-003266
Trematodes
92-003266
Basilichthys microlepidotus
Karyotypes
92-002707
Bathydraconidae
Electrophoresis
92-002756
Bathyraja multispinis
Meristic Studies
92-002322
Species Identification
92-002322
Belodontichthys dinema
Head
92-002355
Beohlkenchelys
New Genus
92-003109
Beohlkenchelys longidentata
Morphology
92-003109
New Species
92-003109
Bergiaria westermanni
Nematodes
92-003220
Parasites/Diseases
92-003220
Spirocamallanus freitasi
92-003220
Blennius pholis
Agonistic Behavior
92-002774
Distribution/Factors of
92-002775
Foods/Feeding
92-002774
Habitat Selection
92-002775
Haemogregarina bigemina
92-003177
Parasites/Diseases
92-003177
Parental Behavior
92-002774
Protozoan Diseases
92-003177
Spawning
92-002774
Territorial Behavior
92-002775
Blicca bjoerkna
Abundance/Factors of
92-002815
Branchial Basket
92-002395
Competition
92-002815
Dams
92-002675
Distribution/Factors of
92-002815
Gill Rakers
92-002395
Hybridization
92-002675
Predator/Prey Relationships
92-002815
Sense Organs
92-002350
Speciation
92-002675
Taste Reception
92-002350
Boleophthalmus boddaerti
Cyanide
92-003344
Detoxification
92-003344
Boreogadus saida
Early Development
92-003721
Larvae
92-003721
Management/Research--Marine
92-003721
Predator/Prey Relationships
92-003721

...CONTINUED...
Boreogadus saida
Recruitment
92-003721
Survival
92-003721
Botia horae
Cytology
92-002594
Epidermis
92-002594
Healing
92-002594
Brachydanio rerio
Anilines
92-003453
Atrazine
92-003371
Bioaccumulation
92-003453
Biosorption
92-003389
Biotransformation
92-003389
Culture/Propagation
92-002175
Diazinon
92-003389
Disease Control
92-003181
Disease-Free Culture
92-003181
Early Development
92-002374
Eggs
92-002494
Embryology
92-002757
Fertilization
92-002494
Ichthyophthirius multifiliis
92-003181
Industrial Wastes
92-003441
Invertebrate Forage
92-002175
Lindane
92-003371
Mutations
92-002757
Osteology
92-002374
Parasites/Diseases
92-003181
Pesticides
92-003371
Pheromones
92-002645
Protozoan Diseases
92-003181
Reproductive System
92-002645
Research Test Fish
92-002757
Sperm
92-002494
Steroids
92-002645
Xenobiotics
92-003371
92-003389
92-003453
Brachymystax
Genetic Diversity
92-002746
...CONTINUED...
Brachymystax
Variation Studies
92-002746
Brachymystax lenok
Distribution/Geographical
92-002320
Meristic Studies
92-002320
Morphometry
92-002320
Osteology
92-002320
Species Identification
92-002320
Brama australis
New Species
92-003104
Branchiostegus japonicus
Egg Composition
92-002662
Eggs
92-002662
Embryology
92-002662
Brotula
Early Development
92-002325
Larval Identification
92-002325
Meristic Studies
92-002325
Morphometry
92-002325
Bryaninops natans
Life History/General
92-002884
Bryaninops tigris
Life History/General
92-002884
Bythites hollisi
Reproduction
92-002952
Calamoichthys calabaricus
Evolution
92-002724
RNA
92-002724
Calamus brachysomus
Age/Growth
92-003023
Callichthyidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Callionymus beniteguri
Photoperiodism
92-002865
Spawning
92-002865
Callorhinchus
Teeth
92-002340
Callorhynchus callorynchus
Anoplocotyloides chorrillensis
92-003241
Anoplocotyloides papillatus
92-003241
Caballerocotyla australis
92-003241
Callorhynchocotyle marplatensis
92-003241
Parasites/Diseases
92-003241

...CONTINUED...
Callorhynchus callorynchus
Trematodes
92-003241
Campostoma anomalum
Hypoxia
92-003382
Industrial Wastes
92-003382
Phenols
92-003382
Capoeta tetrazona
Disease Control
92-003181
Disease-Free Culture
92-003181
Ichthyophthirius multifiliis
92-003181
Parasites/Diseases
92-003181
Protozoan Diseases
92-003181
Caproidae
Paleontology
92-003090
Taxonomy
92-003090
Capros
Osteology
92-002770
Taxonomy
92-002770
Variation Studies
92-002770
Caranx bucculentus
Age/Growth
92-003005
Foods/Feeding
92-003005
Caranx fusus
Competition
92-003589
Interspecies Relationships
92-003589
Management/Research--Marine
92-003589
Stock Assessment
92-003589
Caranx ignobilis
Foods/Feeding
92-003709
Management/Research--Estuaries
92-003709
Nursery Areas
92-003709
Caranx melampygus
Foods/Feeding
92-003709
Management/Research--Estuaries
92-003709
Nursery Areas
92-003709
Carassius auratus
Aeromonas
92-003133
Amino Acids
92-002646
Anoxia
92-002646
Antibiotics
92-003133
Antigens
92-003248
Bacterial Diseases
92-003133

...CONTINUED...
Carassius auratus
Brain
92-002571
Calcium
92-002514
Disease Control
92-003181
Disease-Free Culture
92-003181
Early Development
92-002319
92-002332
Electrophoresis
92-003248
Endocrinology
92-002514
92-002521
Foods/Feeding
92-002853
Gonadotropin
92-002514
Growth Hormone
92-002514
Heart
92-002523
92-002642
Hematology
92-002505
92-002646
Ichthyophthirius multifiliis
92-003181
92-003187
Immune Response
92-003187
92-003248
Liver
92-002646
Musculature
92-002646
Nervous System
92-002319
92-002571
Osteology
92-002332
Parasites/Diseases
92-003133
92-003181
92-003187
92-003234
92-003248
Parasitic Molluscs
92-003248
Peptides
92-002523
Photoperiodism
92-002571
Piscinoodinium pillulare
92-003187
Pituitary Gland
92-002514
Prostaglandins
92-002521
Protozoan Diseases
92-003181
92-003187
Regeneration
92-002424
Reproductive System
92-002521
Sanguinicola inermis
92-003234
Temperature
92-002505

...CONTINUED...
Carassius auratus
Temperature
92-002642
Toxicity Testing
92-003400
Trematodes
92-003234
Villosa iris
92-003248
Vision
92-002424
92-002853
Carassius carassius
Abundance/Factors of
92-003688
Acidification
92-003314
Biosorption
92-003308
Digestive System
92-003001
Foods/Feeding
92-003001
Management/Research--Ponds
92-003688
Polychlorinated Biphenyls
92-003308
Predator/Prey Relationships
92-003010
Sense Organs
92-002350
Taste Reception
92-002350
Trophic Relationships
92-003688
Urban Runoff
92-003308
Carassius gibelio
Cloning
92-002771
Gynogenesis
92-002771
Carcharhinus melanopterus
Aggressive Behavior
92-003078
Injuries
92-003078
Intraspecies Relationships
92-003078
Mortality Factors
92-003078
Parasites/Diseases
92-003078
Carcharhinus plumbeus
Aquariums
92-002248
Culture/Propagation
92-002248
Mortality Factors
92-002248
Water Quality
92-002248
Catla catla
Age/Growth
92-002139
Amino Acids
92-002209
Bacterial Flora
92-002112
Culture/Propagation
92-002112
92-002117
92-002139

...CONTINUED...
Catla catla
Culture/Propagation
92-002209
Diets
92-002209
Early Development
92-002747
Fry Production
92-002117
92-002209
Isozymes
92-002747
Lactate Dehydrogenase
92-002747
Net-Pen Culture
92-002117
Nutrition
92-002209
Polyculture
92-002139
Pond Culture
92-002112
Sewage Effluents
92-002112
Catostomus catostomus
Age/Growth
92-003024
Condition Factors
92-003024
Management/Research--Reservoirs
92-003024
Catostomus columbianus
Acanthocephala
92-003214
Neoechinorhynchus idahoensis
92-003214
Parasites/Diseases
92-003214
Catostomus commersoni
Age/Growth
92-003024
Brain
92-002527
Condition Factors
92-003024
Distribution/Geographical
92-003062
Enzymes
92-003403
Genetic Diversity
92-003305
Gonadotropin
92-002527
Heavy Metals
92-003305
Leeches
92-003180
Management/Research--Reservoirs
92-003024
Maturation
92-003403
Parasites/Diseases
92-003180
Population Genetics
92-003305
Protozoan Diseases
92-003180
Pulp Mill Effluents
92-003402
92-003403
Steroids
92-003403
Trypanosoma catostomi
92-003180

Centrarchidae
Management/Research--Lakes
92-003625
Trophic Relationships
92-003625
Centrobranchus andreae
Taxonomy
92-003050
Variation Studies
92-003050
Zoogeography
92-003050
Centrobranchus nigroocellatus
Taxonomy
92-003050
Variation Studies
92-003050
Zoogeography
92-003050
Centropomus parallelus
Distribution/Geographical
92-003059
Centropomus undecimalis
Activity Patterns
92-002838
Distribution/Vertical
92-002838
Habitat Selection
92-002838
Hypoxia
92-002838
Management/Research--Estuaries
92-002838
Mangroves
92-002838
Pollution
92-002838
Water Quality
92-002838
Centropristis striata
Eyes
92-002614
Pigments
92-002614
Vision
92-002614
Centropyge potteri
Behavior
92-003604
Mate Selection
92-003604
Polygyny
92-003604
Spawning
92-003604
Cepola macrophthalma
Abundance/Factors of
92-003041
Age/Growth
92-003041
Mortality Rates
92-003041
Ceratias holboelli
Endocrinology
92-002375
Epidermis
92-002375
Histology
92-002375
Ceratias tentaculatus
Endocrinology
92-002375
Epidermis
92-002375
...CONTINUED...
Ceratias tentaculatus
Histology
92-002375
Ceratias uranoscopus
Endocrinology
92-002375
Epidermis
92-002375
Histology
92-002375
Chaetodipterus faber
Artificial Reefs
92-003746
Management/Research--Marine
92-003746
Recruitment
92-003746
Chaetodon
Genetic Diversity
92-002738
Variation Studies
92-002738
Chaetodon ornatissimus
Foods/Feeding
92-002814
Intraspecies Relationships
92-002814
Social Behavior
92-002814
Territorial Behavior
92-002814
Chalcalburnus chalcoides
Bioenergetics
92-002812
Foods/Feeding
92-002857
92-002864
Larval Behavior
92-002812
Predator/Prey Relationships
92-002857
92-002864
Swimming Performance
92-002812
Chalcalburnus chalcoides mento
Age/Growth
92-002656
Bioenergetics
92-002656
Foods/Feeding
92-002656
Metabolism
92-002656
Starvation
92-002656
Channichthyidae
Electrophoresis
92-002756
Chanos chanos
Age/Growth
92-002144
92-003045
Brackishwater Culture
92-002144
Culture/Propagation
92-002144
Early Development
92-003045
Feeds
92-002144
Fertilization/Soil and Water
92-002144
Otoliths
92-003045

...CONTINUED...
Chanos chanos
Starvation
92-003045
Characidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Chasmistes brevirostris
Endangered/Threatened Species
92-003795
Life History/General
92-003795
Chasmistes cujus
Endangered/Threatened Species
92-003795
Life History/General
92-003795
Chasmistes liorus
Endangered/Threatened Species
92-003795
Life History/General
92-003795
Chelon labrosus
Age/Growth
92-003018
Dominance
92-003018
Early Development
92-002330
Embryology
92-002330
Reproduction
92-002330
Season
92-003018
Chimaera
Teeth
92-002340
Chondrostoma
Abundance/Factors of
92-002785
Management/Research--Rivers and Streams
92-002785
Microhabitat
92-002785
Nursery Areas
92-002785
Chondrostoma nasus
Biological Indicators
92-003676
Biological Monitoring
92-003443
Cytochrome P450
92-003443
Habitat Evaluation
92-003676
Industrial Wastes
92-003443
Management/Research--Rivers and Streams
92-003676
Chondrostoma polylepis
Abundance/Factors of
92-003696
Stock Assessment
92-003696
Chromogobius quadrivittatus
Distribution/Geographical
92-003049
Chromogobius zebratus
Distribution/Geographical
92-003049
Cichlasoma
Species Identification
92-003092
Cichlasoma cyanoguttatum
Defensive Behavior
92-002807
Parental Behavior
92-002807
Sexual Dimorphism
92-002807
Territorial Behavior
92-002807
Cichlasoma managuense
Age/Growth
92-002187
Culture/Propagation
92-002187
Feeding Experiments
92-002187
Invertebrate Forage
92-002187
Larvae
92-002187
Cichlasoma meeki
Aquariums
92-002249
Coloration
92-002249
Cichlasoma nigrofasciatum
Coloration
92-002851
Habitat Selection
92-002773
Mate Selection
92-002851
Temperature Selection
92-002773
Cichlasoma tetracantha
Age/Growth
92-003039
Cichlasoma urophthalmus
Early Development
92-002437
Nutritional Diseases
92-002437
Parasites/Diseases
92-002437
Tuberculosis
92-002437
Vitamins
92-002437
Cichlidae
Coloration
92-002823
Distribution/Geographical
92-003107
Early Development
92-002366
Habitat Selection
92-003107
Jaws
92-002366
Mate Selection
92-002823
Mouth Parts
92-002366
Speciation
92-002823
Cirrhinus mrigala
Age/Growth
92-002139
Bacteria
92-002133

...CONTINUED...
Cirrhinus mrigala
Bacterial Flora
92-002112
Culture/Propagation
92-002112
92-002133
92-002139
Distribution/Factors of
92-003317
Early Development
92-002747
Isozymes
92-002747
Lactate Dehydrogenase
92-002747
Parasites/Diseases
92-002133
Pollution
92-003317
Polyculture
92-002139
Pond Culture
92-002112
Reproductive System
92-003317
Sewage Effluents
92-002133
Water Quality
92-002133
Citharichthys stigmaeus
Life History/General
92-002876
Citharichthys xanthostigma
Age/Growth
92-003023
Clarias anguillaris
Enzymes
92-002760
Variation Studies
92-002760
Clarias batrachus
Aeromonas hydrophila
92-003128
Bacterial Diseases
92-003128
Disease Susceptibility
92-003128
Estradiol
92-002615
Parasites/Diseases
92-003128
Photoperiodism
92-002615
Pollution
92-003128
Reproductive Cycle
92-002615
Steroids
92-002615
Clarias ebriensis
Enzymes
92-002760
Variation Studies
92-002760
Clarias gariepinus
Age/Growth
92-002732
Enzymes
92-002760
Hybridization
92-002732
92-002759
Karyotypes
92-002759

...CONTINUED...
Clarias gariepinus
Morphology
92-002732
Pheromones
92-002645
Reproduction
92-002732
Reproductive System
92-002645
Steroids
92-002645
Variation Studies
92-002760
Clarias lazera
Endrin
92-003364
Pesticides
92-003364
Toluene
92-003364
Clarias macrocephalus
Culture/Propagation
92-002183
Feeds
92-002183
Fingerling Production
92-002183
Invertebrate Forage
92-002183
Clinitrachus argentatus
Distribution/Geographical
92-003048
Clupea harengus
Abundance/Factors of
92-002898
Algal Blooms
92-003329
Antigens
92-002574
Bacterial Flora
92-002574
Digestive System
92-002574
Early Development
92-002574
Egg Size
92-002937
Egg Survival
92-003329
Fecundity
92-002937
Fish Kills
92-003329
Gear Selectivity
92-003582
Harvest
92-003582
Ichthyoplankton
92-002898
Immune Response
92-002574
Management/Research--Marine
92-002898
92-003582
Mortality Factors
92-003329
Nets/Netting
92-003582
Nets/Trawls
92-003582
Parental Transfer
92-002574
Recruitment
92-002898

Clupea pallasi
Anisakis simplex
92-003246
Biological Tags
92-003246
Cestodes
92-003246
Contracaecum
92-003246
Harvest
92-003495
Hysterothylacium
92-003246
Lacistorhynchus dollfusi
92-003246
Management/Research--Marine
92-003495
Nematodes
92-003246
Parahemiurus merus
92-003246
Parasites/Diseases
92-003246
Stock Assessment
92-003495
Stock Identification
92-003246
Trematodes
92-003246
Clupeidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Cobitidae
Distribution/Factors of
92-003112
Distribution/Geographical
92-003112
Zoogeography
92-003112
Cobitis
Hybridization
92-002763
Polyploidy
92-002763
Cobitis taenia
Maturation
92-002380
Reproductive System
92-002380
Colisa lalia
Carbofuran
92-003434
Insecticides
92-003434
Colossoma macropomum
Adrenaline
92-002832
Aggressive Behavior
92-002832
Catecholamines
92-002832
Culture/Propagation
92-002231
Fingerling Production
92-002231
Schooling Behavior
92-002832
Social Behavior
92-002832
Coregonus
Biological Monitoring
92-003343

...CONTINUED...
Coregonus
Egg Survival
92-003088
Management/Research--Lakes
92-003088
Pesticides
92-003343
Recruitment
92-003088
Coregonus albula
Acidification
92-003314
Acoustical Methods
92-003056
Age/Growth
92-002846
Competition
92-002846
Condition Factors
92-002932
Cotylurus erraticus
92-003251
Culture/Propagation
92-002886
Distribution/Vertical
92-003056
Egg Composition
92-002932
Egg Size
92-002886
92-002932
Embryology
92-002886
Fecundity
92-002932
Fish Kills
92-003251
Fishways
92-003584
Incubation
92-002886
Intraspecies Relationships
92-002846
Management/Research--Lakes
92-003056
Parasites/Diseases
92-003251
Population Studies
92-003056
Size Hierarchies
92-002846
Stock Assessment
92-003056
Trematodes
92-003251
Coregonus artedii
Foods/Feeding
92-002833
Movements
92-002833
Coregonus clupeaformis
Age/Growth
92-003077
Early Development
92-003077
Egg Composition
92-003077
Egg Size
92-003077
Food Supply
92-003077
92-003659
Management/Research--Lakes
92-003077

...CONTINUED...
Coregonus clupeaformis
Management/Research--Lakes
92-003597
Management/Research--Rivers and Streams
92-003659
Meristic Studies
92-002701
Migration
92-003659
Morphometry
92-002701
Multispecies Management
92-003597
Nutrients
92-003659
Recruitment
92-003077
Survival
92-003077
Trophic Relationships
92-003077
92-003659
Variation Studies
92-002701
Water Quality
92-003659
Coregonus huntsmani
Meristic Studies
92-002701
Morphometry
92-002701
Variation Studies
92-002701
Coregonus lavaretus
Age/Growth
92-002895
92-003040
Ascorbic Acid
92-002448
Catch Per Unit Effort
92-002929
Culture/Propagation
92-002141
Early Development
92-002448
Egg Collection
92-002929
Fingerling Production
92-002141
Fingerling Stocking
92-003555
Fishways
92-003584
Invertebrate Forage
92-002141
Management/Research--Lakes
92-002895
92-002929
92-003040
Maturation
92-002929
Nutrition
92-002448
Otoliths
92-003040
Pond Culture
92-002141
Population Studies
92-003555
Recruitment
92-002895
Reproductive Cycle
92-002929

...CONTINUED...
Coregonus lavaretus
Supplemental Stocking
92-003555
Survival
92-002895
Vitamins
92-002448
Year Class Strength
92-002895
Coregonus nasus
Food Supply
92-003659
Management/Research--Rivers and Streams
92-003659
Migration
92-003659
Nutrients
92-003659
Trophic Relationships
92-003659
Water Quality
92-003659
Coregonus peled
Age/Growth
92-003602
Coregonus pidschian
Digestive System
92-002589
Enzymes
92-002589
Fishways
92-003584
Temperature
92-002589
Coregonus wartmanni
Acidification
92-003444
Aluminum
92-003444
Fishways
92-003584
Hematology
92-003444
Maturation
92-003444
Reproductive Cycle
92-003444
Corydoras
DNA
92-002745
Evolution
92-002745
Karyotypes
92-002745
Corydoras aeneus
Cytology
92-002594
Epidermis
92-002594
Healing
92-002594
Coryphaena hippurus
Age/Growth
92-002818
Aggressive Behavior
92-002158
Agonistic Behavior
92-002818
Amino Acids
92-002454
Bioenergetics
92-002417

...CONTINUED...
Coryphaena hippurus
Culture/Propagation
92-002158
92-002206
92-002417
Feeding Experiments
92-002158
Feeds
92-002206
Food Conversion Efficiency
92-002206
Foods/Feeding
92-002818
Larvae
92-002417
Oxygen
92-002417
Rearing Density
92-002158
Respiratory System
92-002417
Survival
92-002158
Taurine
92-002454
Coryphaenoides
Fish Lists/Keys
92-003098
Coryphaenoides armatus
Distribution/Geographical
92-002907
Population Studies
92-002907
Coryphaenoides rupestris
Habitat Selection
92-002776
Management/Research--Marine
92-002776
Microhabitat
92-002776
Cottidae
Air Breathing
92-002550
Respiratory System
92-002550
Cottocomephorus grewingki
DNA
92-002715
Evolution
92-002715
Gene Mapping
92-002715
Mitochondria
92-002715
Cottocomephorus inermis
DNA
92-002715
Evolution
92-002715
Gene Mapping
92-002715
Mitochondria
92-002715
Cottus
Genetic Diversity
92-002758
Heterozygosity
92-002758
Morphology
92-002758
Population Genetics
92-002758
Cottus gobio
Abundance/Factors of
92-002871
...CONTINUED...
Cottus gobio
Acanthocephala
92-003217
Distribution/Geographical
92-002875
Habitat Alterations
92-002871
Hebesoma violentum
92-003217
Life History/General
92-002871
92-002875
92-003649
Management/Research--Rivers and Streams
92-003649
Parasites/Diseases
92-003217
Population Studies
92-003649
Reproduction
92-002871
Taxonomy
92-002875
Cottus kessleri
DNA
92-002715
Evolution
92-002715
Gene Mapping
92-002715
Mitochondria
92-002715
Cryptopsaras couesi
Bacterial Flora
92-002496
Bioluminescence
92-002496
RNA
92-002496
Ctenopharyngodon idella
Age/Growth
92-002139
92-003020
Aquatic Plant Control
92-003083
92-003560
92-003615
92-003683
Chromosomes
92-002768
Control/Biological
92-003083
92-003560
92-003683
Culture/Propagation
92-002139
92-003020
Gynogenesis
92-002768
Herbicides
92-003447
Hybridization
92-002768
Management/Research--Reservoirs
92-003020
Management/Research--Rivers and Streams
92-003683
Maximum Sustainable Yield
92-003020
Parasites/Diseases
92-003257

...CONTINUED...
Ctenopharyngodon idella
Pentastomids
92-003257
Polyculture
92-002139
Pond Culture
92-003020
Pre-Impoundment Studies
92-003683
Rearing Density
92-003020
Sebekia oxycephala
92-003257
Stocking/Introductions
92-003683
Survival
92-002768
Trophic Relationships
92-003683
Water Quality
92-003020
Ctenopoma weeksi
Aquariums
92-002243
Cynolebias
Aquariums
92-002138
Culture/Propagation
92-002138
Pond Culture
92-002138
Cynolebias nigripinnis
Aquariums
92-002246
Cynoscion arenarius
Life History/General
92-002868
Cynoscion regalis
Age/Growth
92-002979
92-002980
Early Development
92-002979
92-002980
Food Supply
92-002979
92-002980
Foods/Feeding
92-002979
92-002980
Predator/Prey Relationships
92-002979
92-002980
Survival
92-002979
92-002980
Cyprinella
Brain
92-002356
Nervous System
92-002356
Cyprinella lutrensis
Habitat Evaluation
92-003655
Management/Research--Rivers and Streams
92-003655
Cyprinella spiloptera
Habitat Selection
92-003682
Management/Research--Rivers and Streams
92-003682

...CONTINUED...
Cyprinella spiloptera
Microhabitat
92-003682
Population Studies
92-003682
Season
92-003682
Cyprinidae
Brain
92-002362
Chemoreception
92-002362
Distribution/Factors of
92-003112
Distribution/Geographical
92-003112
Foods/Feeding
92-002862
92-003470
Habitat Selection
92-003470
Histology
92-002385
Life History/General
92-003470
Lipid Content
92-002385
Metabolism
92-002862
Morphometry
92-002385
Musculature
92-002385
Osteology
92-002331
Seismosensory System
92-002331
Speciation
92-002862
Species Identification
92-002331
Survival
92-002862
Taste Reception
92-002362
Vision
92-002362
Zoogeography
92-003112
Cypriniformes
Taxonomy
92-003100
Cyprinodon
Agricultural Drainage
92-003490
DNA
92-002699
Endangered/Threatened Species
92-003490
Evolution
92-002699
Mitochondria
92-002699
Variation Studies
92-002699
Watershed Management
92-003490
Cyprinodon diabolis
Endangered/Threatened Species
92-003786
Mitigation
92-003786
Cyprinodontiformes
Endangered/Threatened Species
92-003463

...CONTINUED...
Cyprinodontiformes
Habitat Alterations
92-003463
Habitat Protection
92-003463
Life History/General
92-003463
Management/Research--General
92-003463
Cyprinus carpio
Abundance/Factors of
92-003696
Acanthocephala
92-003215
Acidification
92-002570
Aeromonas hydrophila
92-003171
Age/Growth
92-002139
92-002530
92-002606
92-002828
92-003020
Anemia
92-002518
Antigens
92-003248
Bacterial Diseases
92-003171
Benzo(a)pyrene
92-003433
Bioaccumulation
92-003432
Bioenergetics
92-002530
Cage Culture
92-002168
Carcass Traits
92-002606
Chemoreception
92-002811
Chromosomes
92-002768
Colonization
92-003068
Copper
92-003435
Culture/Propagation
92-002139
92-002141
92-002168
92-002226
92-002227
92-002569
92-002606
92-003020
92-003116
92-003194
Cytology
92-002396
Dactylogyrus
92-003255
Diets
92-002227
92-002606
Digestive System
92-002543
92-002570
92-002650
Distribution/Geographical
92-003068
DNA
92-002688

...CONTINUED...
Cyprinus carpio
Dyes
92-003426
Edwardsiella tarda
92-003171
Electrophoresis
92-003248
Endocrinology
92-002639
Enzymes
92-002569
92-002570
Exotic Species
92-003068
92-003540
Eyes
92-002661
Feeding Experiments
92-002226
Feeds
92-002168
92-002226
92-002227
92-002569
Fertilization
92-002422
Fingerling Production
92-002141
Fish as Food
92-002517
Fish Control/Removal
92-003068
Food Digestibility
92-002569
Food Technology
92-002517
Foods/Feeding
92-002811
Formalin
92-003387
Gene Transfer
92-002688
Glucose
92-002606
Gonadotropin
92-002639
Growth Hormone
92-002688
Gynogenesis
92-002768
Gyrodactylus
92-003255
Heart
92-002652
Heavy Metals
92-003431
92-003432
Hematology
92-002518
Herbicides
92-003435
92-003447
Herpesvirus cyprini
92-003213
Hybridization
92-002768
Immune Response
92-003171
92-003248
Invertebrate Forage
92-002141
Lactate Dehydrogenase
92-003426

...CONTINUED...
Cyprinus carpio
Management/Research--Reservoirs
92-003020
Maturation
92-002396
92-002595
Maximum Sustainable Yield
92-003020
Metabolic Rates
92-003387
Metabolism
92-003426
Methidathion
92-003435
Muscle Proteins
92-002517
Musculature
92-002402
Neoechinorhynchus rutili
92-003215
Nickel
92-003431
Nutrition
92-002606
Olfaction
92-002811
Paraquat
92-003435
Parasites/Diseases
92-002518
92-003116
92-003171
92-003194
92-003213
92-003234
92-003248
92-003255
Parasitic Molluscs
92-003248
pH
92-002570
pH Regulation
92-002402
Photoperiodism
92-002543
Ploidy Levels
92-002735
Polyculture
92-002139
Polycyclic Aromatic Hydrocarbons
92-003433
Pond Culture
92-002141
92-002227
92-003020
Predator/Prey Relationships
92-002977
Proteins
92-002650
Protozoan Diseases
92-003194
Radiation
92-003432
Rearing Density
92-002168
92-003020
Recruitment
92-002977
Reintroductions
92-003556
Reproductive System
92-002396
Rigor Mortis
92-002403

...CONTINUED...
Cyprinus carpio
Sanguinicola inermis
92-003234
Sperm
92-002422
92-002595
Sphaerospora renicola
92-003194
Stock Assessment
92-003696
Stocking/Introductions
92-003556
Stress
92-003387
Strontium
92-003432
Sulphadiazine
92-003116
Survival
92-002768
Swimbladder
92-002582
Swimming Performance
92-002828
Temperature
92-002402
92-002403
92-002530
92-002543
92-002650
92-002652
92-003116
92-003194
Testosterone
92-002639
Toxicity Testing
92-003452
Treatment
92-003116
Trematodes
92-003234
92-003255
Trimethoprim
92-003116
Triploid Fish
92-002735
Trophic Relationships
92-003540
Villosa iris
92-003248
Viral Diseases
92-003213
Water Quality
92-002227
92-003020
Xenobiotics
92-003433
Cyprinus carpio communis
Bacterial Flora
92-002112
Culture/Propagation
92-002112
Pond Culture
92-002112
Sewage Effluents
92-002112
Cyprinus hungaricus
Reintroductions
92-003556
Stocking/Introductions
92-003556
Cyprinus kollari
Abundance/Factors of
92-003696

...CONTINUED...
Cyprinus kollari
Stock Assessment
92-003696
Cypselurus exsiliens
Larval Drift
92-003742
Recruitment
92-003742
Cypselurus furcatus
Larval Drift
92-003742
Recruitment
92-003742
Dascyllus albisella
Aquariums
92-002072
Culture/Propagation
92-002072
Habitat Selection
92-002781
Invertebrate Forage
92-002072
Larvae
92-002072
Larval Behavior
92-002781
Recruitment
92-002781
Dascyllus aruanus
Aquariums
92-002072
Culture/Propagation
92-002072
Invertebrate Forage
92-002072
Larvae
92-002072
Dasyatis sabina
Brain
92-002379
Variation Studies
92-002379
Deltistes luxatus
Endangered/Threatened Species
92-003795
Life History/General
92-003795
Dicentrarchus labrax
Age/Growth
92-002097
92-002223
Bacterial Diseases
92-003147
Benzo(a)pyrene
92-003394
92-003395
Biological Monitoring
92-003339
Culture/Propagation
92-002097
92-002223
Feeding Experiments
92-002097
92-002223
Food Conversion Efficiency
92-002223
Gear Efficiency
92-003577
Gear Selectivity
92-003577
Hormones
92-002406
92-002433

...CONTINUED...
Dicentrarchus labrax
Induced Maturation
92-002406
Management/Research--Estuaries
92-002897
Muscle Proteins
92-002410
Nets/Gill Nets
92-003577
Nursery Areas
92-002897
Nutrition
92-002416
Pancreas
92-002416
Parasites/Diseases
92-003147
Pasteurella piscicida
92-003147
Photoperiodism
92-002406
Polycyclic Aromatic Hydrocarbons
92-003394
Recruitment
92-002897
Reproductive Cycle
92-002406
Rigor Mortis
92-002410
Salinity
92-002433
Season
92-002433
Spawning
92-002897
Starvation
92-002097
Steroids
92-002406
Thyroid Gland
92-002433
Thyroxine
92-002433
Dissostichus eleginoides
Digestive System
92-002360
Histology
92-002360
Dorosoma
Nursery Areas
92-003674
Dorosoma cepedianum
Foods/Feeding
92-002309
Plankton
92-002309
Trophic Relationships
92-002309
Dorosoma petenense
Aquatic Plant Control
92-003083
Control/Biological
92-003083
Cooling Reservoirs
92-002905
Foods/Feeding
92-002975
Management/Research--Reservoirs
92-002905
92-002975
Population Studies
92-002905
Power Plants
92-002905

...CONTINUED...
Dorosoma petenense
Predator Introductions
92-002975
Recruitment
92-002905
Stocking/Introductions
92-002975
Trophic Relationships
92-002975
Eigenmannia
Electric Organs
92-002600
92-002612
Electroreception
92-002520
Nervous System
92-002520
Elasmobranchii
Buoyancy Control
92-002654
Elassoma okatie
Distribution/Geographical
92-003069
Eleginops maclovinus
Gonads
92-002432
Sex Reversal
92-002432
Embiotoca lateralis
Competition
92-002802
Foods/Feeding
92-002802
Habitat Selection
92-002802
Intraspecies Relationships
92-002802
Embiotocidae
Early Development
92-002366
Jaws
92-002366
Mouth Parts
92-002366
Empetrichthys merriami
Endangered/Threatened Species
92-003786
Extinction
92-003786
Engraulidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Engraulis
Spawning
92-002933
Temperature
92-002933
Upwelling
92-002933
Engraulis anchoita
Nets/Gill Nets
92-003574
Nets/Purse Seines
92-003574
Engraulis capensis
Age/Growth
92-003743
Collagen
92-003743
Food Supply
92-003743

...CONTINUED...
Engraulis capensis
Management/Research--Marine
92-003743
Musculature
92-003743
Osteology
92-003743
Trophic Relationships
92-003743
92-003773
Engraulis encrasicholus
Egg Drift
92-002967
Larval Drift
92-002967
Management/Research--Estuaries
92-002967
Nursery Areas
92-002967
Tides
92-002967
Engraulis mordax
Age/Growth
92-002427
Bioenergetics
92-002427
Cannibalism
92-002780
Escape Behavior
92-002780
Larval Behavior
92-002780
Predator/Prey Relationships
92-002780
Starvation
92-002780
Swimming Performance
92-002427
Engraulis ringens
Anisakis
92-003119
Foods/Feeding
92-002989
Meinertia
92-003119
Parasites/Diseases
92-003119
Parasitic Isopods
92-003119
Pseudanthocotyloides
92-003119
Trematodes
92-003119
Trophic Relationships
92-002989
Epinephelus akaara
Parasites/Diseases
92-003208
Viral Diseases
92-003208
Whirling Disease
92-003208
Epinephelus fasciatus
Benedenia
92-003270
Gill Parasites
92-003270
Parasites/Diseases
92-003270
Trematodes
92-003270
Epinephelus guaza
Enzymes
92-002479

...CONTINUED...
Epinephelus guaza
Temperature
92-002479
Thermal Tolerance
92-002479
Epinephelus striatus
Age/Growth
92-002867
Culture/Propagation
92-002165
92-002166
Fertilization
92-002166
Harvest
92-002867
Induced Maturation
92-002165
92-002166
Larvae
92-002165
Life History/General
92-002867
Eptatretus stouti
Amino Acids
92-002544
Cytology
92-002363
Early Development
92-002363
Hematology
92-002544
Teeth
92-002363
Ericymba buccata
Habitat Selection
92-003682
Erimyzon sucetta
Parasites/Diseases
92-003257
Esox lucius
Acidification
92-003314
92-003645
Age/Growth
92-003263
Biosorption
92-003321
Catch Per Unit Effort
92-003631
Cestodes
92-003218
Condition Factors
92-003631
Cortisol
92-003383
Digestive System
92-002589
Enzymes
92-002589
Fright Behavior
92-002793
Harvest
92-003631
Heavy Metals
92-003321
92-003383
Ion Transport
92-002666
Liming
92-003645
Management/Research--Lakes
92-003631
92-003645

...CONTINUED...
Esox lucius
Management/Research--Ponds
92-003687
92-003688
Maturation
92-003263
Mercury
92-003321
92-003383
Mortality Factors
92-003263
Musculature
92-002666
Myxobolus cerebralis
92-003178
Nematodes
92-003263
Parasites/Diseases
92-003174
92-003178
92-003218
92-003263
Polychlorinated Biphenyls
92-003383
Polycyclic Aromatic Hydrocarbons
92-003383
Population Studies
92-003263
Potassium
92-002666
Predator/Prey Relationships
92-002805
92-003688
Proliferative Kidney Disease
92-003174
Protozoan Diseases
92-003174
92-003178
Raphidascaris acus
92-003263
Recruitment
92-003687
Sodium
92-002666
Stress
92-002666
92-003383
Temperature
92-002589
Water Level Fluctuations
92-003687
Water Quality
92-003321
Watershed Management
92-003687
Etheostoma blennioides
Habitat Selection
92-003682
Etheostoma brevirostrum
New Species
92-003106
Etheostoma ditrema
Electrophoresis
92-002394
Species Identification
92-002394
Taxonomy
92-002394
Etheostoma exile
Parasites/Diseases
92-003271
Etheostoma flabellare
Electrophoresis
92-002702

...CONTINUED...
Etheostoma flabellare
Genetic Diversity
92-002702
Population Genetics
92-002702
Variation Studies
92-002702
Etheostoma nigrum
Electrophoresis
92-002702
Foods/Feeding
92-003006
Genetic Diversity
92-002702
Parasites/Diseases
92-003271
Population Genetics
92-002702
Variation Studies
92-002702
Etheostoma proeliare
Nursery Areas
92-003674
Etheostoma rubrum
Age/Growth
92-002874
Life History/General
92-002874
Reproduction
92-002874
Etheostoma swaini
Electrophoresis
92-002394
Species Identification
92-002394
Taxonomy
92-002394
Etheostoma tallapoosae
New Species
92-003106
Etheostoma zonale
Genetics
92-002751
Hatchery/Wild Populations
92-002751
Meristic Studies
92-002751
Stocking/Introductions
92-002751
Variation Studies
92-002751
Etrumeus whiteheadi
Age/Growth
92-003743
Collagen
92-003743
Food Supply
92-003743
Management/Research--Marine
92-003743
Musculature
92-003743
Osteology
92-003743
Trophic Relationships
92-003743
Eurycheilus
New Genus
92-003105
Eurycheilus pantherinus
New Species
92-003105
Euthynnus pelamis
Harvest
92-003508
...CONTINUED...
Euthynnus pelamis
Management/Research--Marine
92-003508
Musculature
92-002402
pH Regulation
92-002402
Temperature
92-002402
Exocoetus obtusirostris
Fins
92-002338
Larval Drift
92-003742
Morphometry
92-002338
Recruitment
92-003742
Species Identification
92-002338
Swimming Performance
92-002338
Exocoetus volitans
Larval Drift
92-003742
Recruitment
92-003742
Florenciella lugubris
Bioluminescence
92-002500
Digestive System
92-002500
Histology
92-002500
Forsterygion nigripenne robustum
Competition
92-002821
Dominance
92-002821
Microhabitat
92-002821
Niche Overlaps
92-002821
Territorial Behavior
92-002821
Fugu pardale
Amino Acids
92-002526
Electrophysiology
92-002526
Taste Reception
92-002526
Fundulus diaphanus
Cloning
92-002696
Gynogenesis
92-002696
Hybridization
92-002696
Predator/Prey Relationships
92-002827
Schooling Behavior
92-002827
Unisex Populations
92-002696
Fundulus heteroclitus
Age/Growth
92-003031
Androgen
92-002443
Bioluminescence
92-003422
Brain
92-002527

...CONTINUED...
Fundulus heteroclitus
Carcinogens
92-003442
Cloning
92-002696
Creosote
92-003442
Early Development
92-003031
Embryology
92-002391
Food Conversion Efficiency
92-003031
Gonadotropin
92-002443
92-002527
Gynogenesis
92-002696
Habitat Selection
92-002799
Hepatic Lesions
92-003442
Hormones
92-002443
92-002655
Hybridization
92-002696
Management/Research--General
92-002799
Marshes, Salt
92-002799
Maturation
92-002655
Microhabitat
92-002799
Parasites/Diseases
92-003442
Pentachlorophenol
92-003422
Pollution
92-003442
Spermatogenesis
92-002443
Steroids
92-002443
Temperature
92-002799
Testosterone
92-002443
Unisex Populations
92-002696
Fundulus luciae
Age/Growth
92-003031
Early Development
92-003031
Food Conversion Efficiency
92-003031
Fundulus sciadicus
Fecundity
92-002931
Reproductive Cycle
92-002931
Spawning
92-002931
Gadidae
Fish Preservation
92-003755
92-003756
92-003757
Storage Effects
92-003757
Gadus macrocephalus
Electrophoresis
92-002713

...CONTINUED...
Gadus macrocephalus
Management/Research--Marine
92-002917
Recruitment
92-002917
Stock Identification
92-002713
Variation Studies
92-002713
Gadus morhua
Age/Growth
92-003611
Antigens
92-002574
Bacterial Diseases
92-003121
92-003137
Bacterial Flora
92-002574
Biological Monitoring
92-003291
Climate
92-003492
Coexistence
92-002843
Diagnostic Techniques
92-003121
Digestive System
92-002485
92-002574
Distribution/Geographical
92-002878
Drug Resistance
92-003137
Early Development
92-002574
Enzymes
92-002628
Evacuation
92-003523
Exploitation Rates
92-002878
Foods/Feeding
92-002843
92-002986
92-003523
Hematology
92-002442
Hypoxia
92-002442
Immune Response
92-002574
Insulin
92-002628
Jaws
92-002986
Larval Behavior
92-002986
Life History/General
92-002878
Mammal Predation
92-003002
92-003014
Management/Research--Marine
92-002878
Mortality Rates
92-003611
Oxytetracycline
92-003137
Parasites/Diseases
92-003121
92-003137
Parental Transfer
92-002574

...CONTINUED...
Gadus morhua
Peptides
92-002628
Pollution
92-003121
Population Studies
92-002878
Radiation
92-003291
Respiration
92-002986
Respiratory System
92-002986
Salinity
92-002442
Starvation
92-002628
Stomach Fullness
92-002485
Survival
92-002986
Telemetry
92-003523
Temperature
92-003492
Treatment
92-003137
Trophic Relationships
92-003014
Ulcers
92-003121
Vibrio salmonicida
92-003137
Gadus morhua macrocephalus
Foods/Feeding
92-003009
Management/Research--Marine
92-003009
Trophic Relationships
92-003009
Galaxias
Distribution/Factors of
92-003064
Habitat Protection
92-003064
Habitat Selection
92-003064
Management/Research--Rivers and Streams
92-003064
Taxonomy
92-003094
Galeorhinus galeus
Fecundity
92-002939
Maturation
92-002939
Reproductive Cycle
92-002939
Gambusia affinis
Allozymes
92-002720
Biosorption
92-003412
Bird Predation
92-002991
Ciguatera
92-003302
Endosulfan
92-003412
Foods/Feeding
92-002317
Habitat Evaluation
92-003677

...CONTINUED...
Gambusia affinis
Heavy Metals
92-002720
Ichthyotoxin
92-003302
Insecticides
92-003412
Management/Research--Rivers and Streams
92-003677
Mercury
92-002720
Nutrition
92-002435
Photoperiodism
92-002435
Pollution Tolerance
92-002720
Predator/Prey Relationships
92-002991
Reproduction
92-002435
Trophic Relationships
92-002317
Gambusia affinis holbrooki
Age/Growth
92-003034
Heavy Metals
92-003391
92-003393
Mercuric Chloride
92-003391
Mercury
92-003391
92-003393
Metabolism
92-003391
Pollution Tolerance
92-003391
Population Studies
92-003393
Stress
92-003391
Temperature
92-003034
Toxicity Testing
92-003393
Variation Studies
92-003034
Garra ceylonensis
Age/Growth
92-002894
Fecundity
92-002894
Management/Research--Rivers and Streams
92-002894
Population Studies
92-002894
Sex Ratios
92-002894
Gasteropelecidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Gasterosteidae
Coloration
92-002824
Evolution
92-002824
Interspecies Relationships
92-002824

...CONTINUED...
Gasterosteidae
Mate Selection
92-002824
Parental Behavior
92-002824
Gasterosteus aculeatus
Abundance/Factors of
92-002790
Brain
92-002353
Cannibalism
92-002790
Cestodes
92-003218
Colonization
92-002912
Coloration
92-002824
DNA
92-002753
Electrophoresis
92-002753
Escape Behavior
92-002805
Evolution
92-002824
Foods/Feeding
92-002792
92-002842
92-002982
Fright Behavior
92-002792
Gene Mapping
92-002753
Habitat Selection
92-002805
Interspecies Relationships
92-002824
Mate Selection
92-002824
Nervous System
92-002353
Olfaction
92-002353
Parasites/Diseases
92-003218
Parental Behavior
92-002824
Predator/Prey Relationships
92-002792
92-002805
92-002841
92-002842
Reproduction
92-002790
Schooling Behavior
92-002841
Trophic Relationships
92-002912
Geophagus
Body Form
92-002767
Foods/Feeding
92-002767
Genetic Diversity
92-002767
Head
92-002767
Variation Studies
92-002767
Geophagus brasiliensis
Foods/Feeding
92-002309
...CONTINUED...
Geophagus brasiliensis
Plankton
92-002309
Trophic Relationships
92-002309
Gila cypha
Endangered/Threatened Species
92-003800
Laws/Law Enforcement
92-003800
Gila elegans
Endangered/Threatened Species
92-003800
Evolution
92-002697
Hybridization
92-002697
Laws/Law Enforcement
92-003800
Population Genetics
92-002697
Species Identification
92-002697
Gila robusta jordani
Larval Identification
92-003777
Spectrometry
92-003777
Gila robusta robusta
Evolution
92-002697
Hybridization
92-002697
Population Genetics
92-002697
Species Identification
92-002697
Gila robusta seminuda
Evolution
92-002697
Hybridization
92-002697
Population Genetics
92-002697
Species Identification
92-002697
Gillichthys mirabilis
Enzymes
92-002659
Lactate Dehydrogenase
92-002659
Musculature
92-002659
Gillichthys seta
Enzymes
92-002659
Lactate Dehydrogenase
92-002659
Musculature
92-002659
Ginglymostoma cirratum
Hematology
92-002447
Ion Transport
92-002447
Girella
Taxonomy
92-002250
Glyptocephalus cynoglossus
Habitat Selection
92-002776
Management/Research--Marine
92-002776

...CONTINUED...
Glyptocephalus cynoglossus
Microhabitat
92-002776
Gobiesox maeandricus
Adhesive Discs
92-002787
Foods/Feeding
92-002787
Gobio albipinnatus
Biological Indicators
92-003676
Dams
92-002675
Habitat Evaluation
92-003676
Hybridization
92-002675
Management/Research--Rivers and Streams
92-003676
Speciation
92-002675
Gobio gobio
Abundance/Factors of
92-002785
Gonads
92-002522
Management/Research--Rivers and Streams
92-002785
Maturation
92-002522
Microhabitat
92-002785
Photoperiodism
92-002522
Reproductive Cycle
92-002522
Gobiomorphus cotidianus
Coloration
92-002372
Gills
92-002372
Sexual Dimorphism
92-002372
Gobius niger
Age/Growth
92-002873
Lagoons
92-002873
Life History/General
92-002873
Nursery Areas
92-002873
Population Studies
92-002873
Gobiusculus flavescens
Chemical Reclamation
92-003520
Piscicides
92-003520
Predator Control
92-003520
Rotenone
92-003520
Goodea
Embryology
92-002529
Enzymes
92-002529
Gymnocephalus cernuus
Acidification
92-003314

...CONTINUED...
Gymnocephalus cernuus
Cestodes
92-003218
Parasites/Diseases
92-003218
Gymnocranius audleyi
Encotyllabe caballeroi
92-003232
Parasites/Diseases
92-003232
Trematodes
92-003232
Gymnodraco acuticeps
Evolution
92-002397
Meristic Studies
92-002397
Osteology
92-002397
Seismosensory System
92-002397
Species Identification
92-002397
Gymnoscopelus nicholsi
Mammal Predation
92-003079
Mortality Factors
92-003079
Gymnothorax australicola
New Species
92-003101
Gymnotidae
Cytology
92-002669
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Nervous System
92-002669
Proteins
92-002669
Haemulidae
Artificial Reefs
92-003482
Bank Revetment
92-003482
Early Development
92-003482
Habitat Alterations
92-003482
Management/Research--Marine
92-003732
Mangroves
92-003732
Nursery Areas
92-003482
92-003732
Haemulon flavolineatum
Abundance/Factors of
92-003707
Helminths
92-003123
Lunar Influences
92-003707
Management/Research--Estuaries
92-003707
Mangroves
92-003707
Movements
92-003707
Parasites/Diseases
92-003123

...CONTINUED...
Haemulon flavolineatum
Photoperiodism
92-003707
Population Studies
92-003707
Season
92-003707
Haemulon sciurus
Abundance/Factors of
92-003707
Lunar Influences
92-003707
Management/Research--Estuaries
92-003707
Mangroves
92-003707
Movements
92-003707
Photoperiodism
92-003707
Population Studies
92-003707
Season
92-003707
Halichoeres bivittatus
Ciguatera
92-002988
Public Health Problems
92-002988
Trophic Relationships
92-002988
Harriotta
Teeth
92-002340
Helicolenus lengerichi
Distribution/Factors of
92-002349
Dominance
92-002349
Fecundity
92-002349
Habitat Selection
92-002349
Maturation
92-002349
Meristic Studies
92-002349
Morphometry
92-002349
Movements
92-002349
Hemichromis bimaculatus
Adrenaline
92-002832
Aggressive Behavior
92-002832
Catecholamines
92-002832
Schooling Behavior
92-002832
Social Behavior
92-002832
Hemigrammus caudovittatus
Adrenaline
92-002832
Aggressive Behavior
92-002832
Catecholamines
92-002832
Schooling Behavior
92-002832
Social Behavior
92-002832
Heterobranchus longifilis
Age/Growth
92-002732
Enzymes
92-002760
Hybridization
92-002732
92-002759
Karyotypes
92-002759
Morphology
92-002732
Reproduction
92-002732
Variation Studies
92-002760
Heterodontus francisci
Brain
92-002623
Enzymes
92-002623
Nervous System
92-002623
Serotonin
92-002623
Heteropneustes fossilis
Aeromonas hydrophila
92-003427
Bacterial Diseases
92-003427
Cadmium
92-003427
Heavy Metals
92-003427
Hexachlorocyclohexane
92-003427
92-003430
Immune Response
92-003427
Insecticides
92-003430
Malathion
92-003430
Parasites/Diseases
92-003427
Pollution
92-003427
Hexagrammos decagrammus
Foods/Feeding
92-002984
Mouth Parts
92-002984
Predator/Prey Relationships
92-002984
Hexagrammos stelleri
Cytology
92-002393
Hormones
92-002393
Nervous System
92-002393
Hippocampus
Early Development
92-002951
Parental Behavior
92-002951
Hippoglossina stomata
Age/Growth
92-003023
Hippoglossoides elassodon
Food Supply
92-003000
Foods/Feeding
92-003000

...CONTINUED...
Hippoglossoides elassodon
Larval Behavior
92-003000
Hippoglossus hippoglossus
Infectious Pancreatic Necrosis
92-003209
Parasites/Diseases
92-003209
Viral Diseases
92-003209
Hirundichthys speculiger
Larval Drift
92-003742
Recruitment
92-003742
Hispidoberyx ambagiosus
Osteology
92-002361
Taxonomy
92-002361
Histrio histrio
Distribution/Geographical
92-003061
Holocentrus marianus
Distribution/Geographical
92-002955
Distribution/Vertical
92-002955
Habitat Selection
92-002955
Holocentrus rufus
Distribution/Geographical
92-002955
Distribution/Vertical
92-002955
Habitat Selection
92-002955
Holocentrus vexillarius
Distribution/Geographical
92-002955
Distribution/Vertical
92-002955
Habitat Selection
92-002955
Homalopteridae
Taxonomy
92-003100
Hoplostethus atlanticus
Reproduction
92-002923
Howella brodiei
Bioluminescence
92-002500
Digestive System
92-002500
Histology
92-002500
Hucho perryi
Genetic Diversity
92-002746
Variation Studies
92-002746
Hucho taimen
Genetic Diversity
92-002746
Variation Studies
92-002746
Huso huso
Culture/Propagation
92-002184
Feeding Experiments
92-002184
Hybridization
92-002184
Hybopsis
Brain
92-002356
Nervous System
92-002356
Hybopsis aestivalis
Habitat Evaluation
92-003677
Management/Research--Rivers and Streams
92-003677
Hydrolagus
Teeth
92-002340
Hydrolagus colliei
Brain
92-002622
Endocrinology
92-002622
Evolution
92-002724
Nervous System
92-002622
RNA
92-002724
Hypophthalmichthys molitrix
Age/Growth
92-002139
Bacteria
92-002133
Bacterial Flora
92-002112
Biosorption
92-003299
Cesium
92-003299
Culture/Propagation
92-002112
92-002131
92-002133
92-002139
Enzymes
92-002479
Fertilization/Soil and Water
92-002131
Fish Preservation
92-003751
Foods/Feeding
92-002997
Irradiation
92-003751
Parasites/Diseases
92-002133
Polyculture
92-002139
Pond Culture
92-002112
Radiation
92-003299
Sewage Effluents
92-002112
92-002131
92-002133
Storage Effects
92-003751
Temperature
92-002479
Thermal Tolerance
92-002479
Water Quality
92-002131
92-002133
Hypsopsetta guttulata
Life History/General
92-002876

Ictalurus
Toxicity Testing
92-003274
Ictalurus furcatus
Culture/Propagation
92-002136
92-002229
Feeds
92-002229
Genetic Strains
92-002136
Hybridization
92-002136
Ictalurus melas
Nursery Areas
92-003674
Ictalurus natalis
Parasites/Diseases
92-003257
92-003271
Ictalurus nebulosus
Abnormalities
92-003372
Leeches
92-003180
Naphthoflavone
92-003372
Neoplasms
92-003372
Parasites/Diseases
92-003180
92-003257
92-003271
92-003372
Polycyclic Aromatic Hydrocarbons
92-003372
Protozoan Diseases
92-003180
Trypanosoma catostomi
92-003180
Ictalurus punctatus
Acetodextra amiuri
92-003265
Aeromonas
92-003155
Aeromonas hydrophila
92-003161
Age/Growth
92-002181
92-002464
92-003030
Ammonia
92-003334
Ascorbic Acid
92-002464
92-003143
Aurantiactinomyxon
92-003176
92-003189
Bacteria
92-002115
Bacterial Diseases
92-003143
92-003152
92-003155
92-003161
92-003163
92-003168
92-003170
Bactericides
92-003143
92-003155
Biochemical Composition
92-002221

...CONTINUED...
Ictalurus punctatus
Biofiltration
92-002124
92-002260
Biosorption
92-003279
Cage Culture
92-002113
Calcium
92-003161
Carcass Traits
92-002221
Chlorothalonil
92-003362
Commercial Fishing
92-003672
Cortisol
92-003143
Culture/Propagation
92-002111
92-002113
92-002115
92-002124
92-002136
92-002146
92-002181
92-002196
92-002212
92-002221
92-002234
92-002260
92-002280
92-003170
92-003179
92-003334
Cytology
92-002452
Diagnostic Techniques
92-003168
Diets
92-002181
92-002196
Economic Value
92-002280
Economics
92-002111
92-002280
92-003179
Edwardsiella
92-003155
Edwardsiella ictaluri
92-003143
92-003152
92-003163
92-003168
92-003170
Eggs
92-002343
Electrophysiology
92-002452
Escherichia coli
92-003155
Eyes
92-002452
Fatty Acids
92-002221
Feeding Experiments
92-002196
92-002221
Feeds
92-002212
Fish Freshness Testing
92-003758

...CONTINUED...
Ictalurus punctatus
Fish Preservation
92-003758
Fish Pumps
92-002234
Fungicides
92-003362
Genetic Strains
92-002136
Harvest
92-003672
Heavy Metals
92-003336
Hematology
92-002181
92-002513
92-002547
Hybridization
92-002136
Immune Response
92-003155
92-003161
92-003168
92-003170
Marketing
92-002280
Maturation
92-003672
Nitrogen
92-002115
Nursery Areas
92-003674
Nutrition
92-002181
92-002464
92-003143
92-003161
Oxygenation
92-002124
Parasites/Diseases
92-003143
92-003152
92-003155
92-003161
92-003163
92-003168
92-003176
92-003179
92-003189
92-003265
Pesticides
92-003279
Phagocytosis
92-003143
Phosphorus
92-002115
Plankton Control
92-002115
Polychlorinated Biphenyls
92-003279
Pond Culture
92-002113
92-002115
92-002124
Production
92-002111
92-002113
Proliferative Gill Disease
92-003176
92-003179
92-003189
Protozoan Diseases
92-003176

...CONTINUED...
Ictalurus punctatus
Protozoan Diseases
92-003179
92-003189
Pseudomonas
92-003155
Rearing Density
92-002113
Recirculating Systems
92-002124
92-002260
Selective Breeding
92-002146
Sex Determination
92-002636
Sperm
92-002343
Spines
92-003030
Staphylococcus aureus
92-003168
Starvation
92-002221
Stock Assessment
92-003672
Storage Effects
92-003758
Survival
92-002181
92-003334
Transportation
92-002234
Trematodes
92-003265
Vitamins
92-002464
92-003170
Water Quality
92-003334
Xenobiotics
92-003336
Zinc
92-003161
92-003336
Ilyodon
Embryology
92-002529
Enzymes
92-002529
Ilyodon xantusi
Disease Susceptibility
92-002690
Genetic Strains
92-002690
Ichthyophthirius multifiliis
92-002690
Parasites/Diseases
92-002690
Protozoan Diseases
92-002690
Iriatherina werneri
Aquariums
92-002242
Taxonomy
92-002242
Istiophorus platypterus
Catch Per Unit Effort
92-003497
Creel Census
92-003497
Management/Research--Marine
92-003497
Isurus oxyrinchus
Gear Efficiency
92-003578

...CONTINUED...
Isurus oxyrinchus
Longlines
92-003578
Metabolism
92-002413
Thermogenic Tissue
92-002413
Johniops vogleri
Age/Growth
92-002885
Habitat Selection
92-002885
Nursery Areas
92-002885
Recruitment
92-002885
Konosirus punctatus
Gear Efficiency
92-003573
Gear Selectivity
92-003573
Nets/Trammel Nets
92-003573
Labeo bata
Early Development
92-002747
Isozymes
92-002747
Lactate Dehydrogenase
92-002747
Labeo rohita
Aeromonas hydrophila
92-003128
Age/Growth
92-002139
Bacterial Diseases
92-003128
Bacterial Flora
92-002112
Culture/Propagation
92-002112
92-002137
92-002139
92-002140
Disease Susceptibility
92-003128
Early Development
92-002747
Egg Production
92-002140
Feeding Experiments
92-002137
Fertilization/Soil and Water
92-002137
Fingerling Production
92-002137
92-002140
Fish Preservation
92-003747
Fry Production
92-002140
Isozymes
92-002747
Lactate Dehydrogenase
92-002747
Parasites/Diseases
92-003128
Pollution
92-003128
Polyculture
92-002139
Pond Culture
92-002112

...CONTINUED...
Labeo rohita
Urea
92-002140
Water Quality
92-002140
Labroides phthirophagus
Coloration
92-002820
Intraspecies Relationships
92-002820
Lactophrys
Haliotrema
92-003235
Parasites/Diseases
92-003235
Trematodes
92-003235
Lagodon rhomboides
Foods/Feeding
92-002974
Management/Research--Marine
92-002974
Population Studies
92-002974
Predator/Prey Relationships
92-002974
Seagrass Beds
92-002974
Lampetra aepyptera
Age/Growth
92-002831
Competition
92-002831
Interspecies Relationships
92-002831
Larval Behavior
92-002831
Lampetra ayresi
Age/Growth
92-002921
Spawning
92-002921
Lampetra fluviatilis
Brain
92-002335
Hematology
92-002487
92-002525
Hypothalamic-Hypophysial System
92-002335
Ion Transport
92-002487
92-002525
Nervous System
92-002335
Osmoregulation
92-002487
Lampetra japonica
Early Development
92-002722
Gene Mapping
92-002722
Morphology
92-002722
Lampetra richardsoni
Age/Growth
92-002921
Spawning
92-002921
Lateolabrax japonicus
Dactylogyrus inversus
92-003262
Parasites/Diseases
92-003262

...CONTINUED...
Lateolabrax japonicus
Treatment
92-003262
Trematodes
92-003262
Lates calcarifer
Age/Growth
92-002174
Cage Culture
92-002478
92-002638
Culture/Propagation
92-002174
92-002269
92-002478
92-002638
92-003331
Diets
92-002174
Egg Production
92-002638
Fatty Acids
92-002174
Fish Kills
92-003331
Fry Production
92-002174
Hormones
92-002269
92-002478
Incubation
92-002269
Induced Maturation
92-002478
Laboratory Spawning
92-002269
Larvae
92-003331
Lunar Influences
92-002478
Maturation
92-002638
Nutrition
92-002174
Parasites/Diseases
92-003331
Ploidy Levels
92-002269
Reproductive Cycle
92-002478
92-002638
Survival
92-002174
Viral Diseases
92-003331
Lates niloticus
Predator/Prey Relationships
92-002977
Stocking/Introductions
92-003553
Latimeria chalumnae
DNA
92-002739
Evolution
92-002739
Mitochondria
92-002739
Lebistes reticulatus
Dieldrin
92-003369
Insecticides
92-003369
Lepidorhombus boscii
Early Development
92-002383
...CONTINUED...
Lepidorhombus boscii
Morphometry
92-002383
Pigments
92-002383
Lepidosirenidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Lepisosteus osseus
Embryology
92-002368
Lepisosteus spatula
Evolution
92-002724
RNA
92-002724
Lepomis
Aquatic Plants
92-003691
Caryophyllaeus laticeps
92-003228
Cestodes
92-003228
Culture/Propagation
92-003691
Nursery Areas
92-003674
Parasites/Diseases
92-003228
Taste and Odor Problems
92-003691
Lepomis auritus
Habitat Selection
92-003682
Parasites/Diseases
92-003271
Lepomis cyanellus
Benzo(a)pyrene
92-003414
Biotransformation
92-003414
Bothriocephalus formosus
92-003216
Cestodes
92-003216
Naphthoflavone
92-003414
Parasites/Diseases
92-003216
Lepomis gibbosus
Age/Growth
92-002859
Coexistence
92-002813
Competition
92-002813
92-002834
Foods/Feeding
92-002834
92-002859
Interspecies Relationships
92-002813
Parasites/Diseases
92-003271
Predator/Prey Relationships
92-002859
Lepomis macrochirus
Age/Growth
92-002847
92-002859
Agricultural Drainage
92-003310

...CONTINUED...
Lepomis macrochirus
Aluminum
92-003310
Anthracene
92-003401
Aquatic Plants
92-002847
Benzo(a)pyrene
92-003414
Biosorption
92-003380
Biotransformation
92-003414
Cadmium
92-003347
Chromium
92-003363
Coexistence
92-002813
92-003534
Competition
92-002813
92-002834
Copper
92-003378
Diazinon
92-003356
Digestive System
92-002354
Dyes
92-003401
Fenvalerate
92-003285
92-003306
92-003325
Fins
92-002795
Food Supply
92-003013
Foods/Feeding
92-002309
92-002833
92-002834
92-002847
92-002859
Gills
92-003356
Habitat Selection
92-002847
Hardness
92-003310
Heavy Metals
92-003347
92-003378
92-003380
Histology
92-002354
92-003356
Hypoxia
92-003378
Insecticides
92-003285
92-003306
92-003325
Interspecies Relationships
92-002813
Liver
92-003347
Management/Research--Ponds
92-003285
92-003306
92-003325
92-003534

...CONTINUED...
Lepomis macrochirus
Management/Research--Ponds
92-003690
Management/Research--Reservoirs
92-003013
Metabolism
92-002445
Metallothionein
92-003347
Movements
92-002833
Naphthoflavone
92-003414
Oxygen
92-002445
92-003401
Parasites/Diseases
92-003256
92-003257
Plankton
92-002309
Pollution
92-003690
Polycyclic Aromatic Hydrocarbons
92-003401
Predator/Prey Relationships
92-002847
92-002859
92-003013
92-003534
Pyrethroids
92-003285
92-003325
Respiration
92-002445
Season
92-003256
Selenium
92-003310
92-003380
Stress
92-003378
Swimming Performance
92-002795
92-002861
Techniques
92-003363
Temperature
92-003401
Trematodes
92-003256
Trophic Relationships
92-002309
92-003013
92-003285
92-003325
92-003690
Lepomis megalotis
Parasites/Diseases
92-003271
Lepomis punctatus
Parasites/Diseases
92-003271
Lepophidium prorates
Age/Growth
92-003023
Leporinus boehlkei
Body Form
92-002348
Species Identification
92-002348
Variation Studies
92-002348

Leporinus friderici
Body Form
92-002348
Species Identification
92-002348
Variation Studies
92-002348
Leporinus muyscorum
Body Form
92-002348
Species Identification
92-002348
Variation Studies
92-002348
Leucaspius delineatus
Sense Organs
92-002350
Taste Reception
92-002350
Leuciscus cephalus
Abundance/Factors of
92-002785
Age/Growth
92-002656
Bioenergetics
92-002656
Biological Monitoring
92-003443
Cytochrome P450
92-003443
Foods/Feeding
92-002656
Industrial Wastes
92-003443
Management/Research--Rivers and Streams
92-002785
Markewitschiana triaxonis
92-003243
Metabolism
92-002656
Microhabitat
92-002785
Nursery Areas
92-002785
Parasites/Diseases
92-003243
Starvation
92-002656
Trematodes
92-003243
Leuciscus idus
Biological Indicators
92-003676
Habitat Evaluation
92-003676
Management/Research--Rivers and Streams
92-003676
Leuciscus idus melanotus
Toxicity Testing
92-003386
Leuciscus leuciscus
Abundance/Factors of
92-002785
Management/Research--Rivers and Streams
92-002785
Microhabitat
92-002785
Nursery Areas
92-002785
Limanda ferruginea
Fecundity
92-002953

...CONTINUED...
Limanda ferruginea
Spawning
92-002953
Limanda herzensteini
Competition
92-002855
Condition Factors
92-002946
Distribution/Seasonal
92-002946
Interspecies Relationships
92-002855
Life History/General
92-002946
Reproductive Cycle
92-002946
Limanda limanda
Biological Indicators
92-003192
Biological Monitoring
92-003309
Glugea
92-003192
Lesions
92-003221
Lipomas
92-003221
Ocean Dumping
92-003309
Parasites/Diseases
92-003192
92-003221
92-003309
Pollution
92-003309
Protozoan Diseases
92-003192
Sewage Effluents
92-003309
Limnothrissa miodon
Management/Research--Lakes
92-003639
Population Studies
92-003639
Stock Assessment
92-003639
Liopsetta obscura
Musculature
92-002402
pH Regulation
92-002402
Temperature
92-002402
Liza aurata
Age/Growth
92-003018
Dominance
92-003018
Season
92-003018
Liza ramada
Age/Growth
92-003018
Dominance
92-003018
Season
92-003018
Lonchopisthus
Life History/General
92-002880
Lota lota
Abundance/Factors of
92-003629

...CONTINUED...
Lota lota
Acidification
92-003314
Cestodes
92-003218
Digestive System
92-002589
Enzymes
92-002589
Habitat Selection
92-003629
Management/Research--Lakes
92-003629
Parasites/Diseases
92-003218
Recruitment
92-003629
Temperature
92-002589
Lutjanidae
Artificial Reefs
92-003482
Bank Revetment
92-003482
Early Development
92-003482
Habitat Alterations
92-003482
Management/Research--Marine
92-003732
Mangroves
92-003732
Nursery Areas
92-003482
92-003732
Lutjanus carponotatus
Benedenia
92-003270
Gill Parasites
92-003270
Parasites/Diseases
92-003270
Trematodes
92-003270
Luxilis cornutus
Habitat Selection
92-003682
Luxilus
Brain
92-002356
Nervous System
92-002356
Luxilus cornutus
Early Development
92-002347
Osteology
92-002347
Lycodes frigidus
Chlorinated Hydrocarbons
92-003290
Pesticides
92-003290
Pollution
92-003290
Polychlorinated Biphenyls
92-003290
Trophic Relationships
92-003290
Lythrurus
Brain
92-002356
Nervous System
92-002356
Macropodus opercularis
Foods/Feeding
92-002784
Management/Research--General
92-002784
Mosquito Control
92-002784
Predator/Prey Relationships
92-002784
Vector Control
92-002784
Macrourus berglax
Gibsonia borealis
92-003223
Parasites/Diseases
92-003223
Trematodes
92-003223
Makaira nigricans
Brain
92-002644
Catch Per Unit Effort
92-003497
Creel Census
92-003497
Enzymes
92-002644
Eyes
92-002644
Management/Research--Marine
92-003497
Osteology
92-002546
Swimming Performance
92-002546
Thermogenic Tissue
92-002644
Malacosteus niger
Eyes
92-002456
Pigments
92-002456
Malapterurus electricus
Electric Behavior
92-002840
Interspecies Relationships
92-002840
Territorial Behavior
92-002840
Mallotus villosus
Distribution/Seasonal
92-002964
Distribution/Vertical
92-002964
Electrophoresis
92-002754
Embryology
92-003311
Incubation
92-003311
Management/Research--Marine
92-003311
Morphometry
92-002754
Nursery Areas
92-003311
Oil Pollution
92-003311
Pollution
92-003311
Stock Identification
92-002754
Temperature
92-002964

...CONTINUED...
Mallotus villosus
Variation Studies
92-002754
Mallotus villosus socialis
Age/Growth
92-003046
Otoliths
92-003046
Melanocetus johnsoni
Bacterial Flora
92-002496
Bioluminescence
92-002496
RNA
92-002496
Melanogrammus aeglefinus
Commercial Fishing
92-003500
Exploitation Rates
92-003500
Harvest
92-003500
Management/Research--Marine
92-003500
Population Studies
92-003500
Recruitment
92-003500
Menidia beryllina
Culture/Propagation
92-002173
92-002195
Feeds
92-002173
92-002195
Habitat Evaluation
92-003677
Invertebrate Forage
92-002173
92-002195
Larvae
92-002173
92-002195
Management/Research--Rivers and Streams
92-003677
Pesticides
92-003379
Reproduction
92-002936
Toxicity Testing
92-003379
Menidia menidia
Age/Growth
92-003003
Food Conversion Efficiency
92-003003
Food Supply
92-003003
Latitude
92-003003
Merlangius merlangus
Commercial Fishing
92-003706
Discarded Bycatch
92-003706
Foods/Feeding
92-002985
Gear Selectivity
92-003567
Harvest
92-003706
Management/Research--Estuaries
92-003706
Merluccius angustimanus
Age/Growth
92-003023
Merluccius bilinearis
Activity Patterns
92-002850
Distribution/Vertical
92-002850
Foods/Feeding
92-002850
Otoliths
92-002367
Variation Studies
92-002367
Merluccius capensis
Age/Growth
92-002956
Distribution/Factors of
92-002956
Distribution/Vertical
92-002956
Otoliths
92-002367
Population Studies
92-002956
Variation Studies
92-002367
Merluccius gayi
Otoliths
92-002367
Variation Studies
92-002367
Merluccius merluccius
Biosorption
92-003335
Heavy Metals
92-003335
Mercury
92-003335
Otoliths
92-002367
Public Health Problems
92-003335
Variation Studies
92-002367
Merluccius paradoxus
Age/Growth
92-002956
Distribution/Factors of
92-002956
Distribution/Vertical
92-002956
Otoliths
92-002367
Population Studies
92-002956
Variation Studies
92-002367
Merluccius productus
Activity Patterns
92-003008
Foods/Feeding
92-003008
Otoliths
92-002367
Predator/Prey Relationships
92-003008
Variation Studies
92-002367
Microcapros
Osteology
92-002770
Taxonomy
92-002770

...CONTINUED...
Microcapros
Variation Studies
92-002770
Microgadus proximus
Brain
92-002527
Gonadotropin
92-002527
Micromesistius poutassou
Exploitation Rates
92-003728
Management/Research--Marine
92-003728
Stock Assessment
92-003728
Stock Identification
92-003728
Micrometrus minimus
Bioenergetics
92-002942
Reproductive Cycle
92-002942
Micropogonias furnieri
Metabolic Rates
92-002409
Nursery Areas
92-002409
Oxygen
92-002409
Salinity
92-002409
Micropogonias undulatus
Age/Growth
92-003025
Condition Factors
92-002474
Distribution/Vertical
92-002909
Fatty Acids
92-002474
Lipid Content
92-002474
Management/Research--Estuaries
92-002909
Otoliths
92-003025
Paleontology
92-003025
Recruitment
92-002909
Micropterus dolomieu
Bioenergetics
92-002801
Early Development
92-002976
Foods/Feeding
92-002976
Habitat Evaluation
92-003684
Habitat Selection
92-003684
Management/Research--Rivers and Streams
92-003684
Parental Behavior
92-002801
Population Studies
92-003684
Year Class Strength
92-002976
Micropterus punctulatus
Hooking/Handling Mortality
92-003575
Micropterus salmoides
Abundance/Factors of
92-003696
Aquatic Plants
92-003691
Coexistence
92-003534
Condition Factors
92-002192
Culture/Propagation
92-002192
92-003691
Fecundity
92-002192
Feeds
92-002192
Habitat Evaluation
92-003684
Habitat Selection
92-003684
Hooking/Handling Stress
92-002488
Management/Research--Ponds
92-003534
Management/Research--Rivers and Streams
92-003684
Maturation
92-002502
Multivariate Analysis
92-003684
Nutrition
92-002192
92-002502
Parasites/Diseases
92-003256
92-003257
Population Studies
92-003684
Predator Introductions
92-003534
Predator/Prey Relationships
92-003534
Regulations/Catch and Release
92-002488
Reproductive Cycle
92-003620
Season
92-003256
Stock Assessment
92-003696
Stocking/Introductions
92-003534
Stress
92-002488
Swimming Performance
92-002808
Taste and Odor Problems
92-003691
Trematodes
92-003256
Vitellogenin
92-002502
Micropterus salmoides floridanus
Electrophoresis
92-003554
Genetics
92-003554
Hybridization
92-003554
Population Genetics
92-003554
Stocking/Introductions
92-003554

Micropterus salmoides salmoides
Electrophoresis
92-003554
Genetics
92-003554
Hybridization
92-003554
Population Genetics
92-003554
Stocking/Introductions
92-003554
Mirogrex terraesanctae terraesanctae
Management/Research--Lakes
92-003630
Nursery Areas
92-003630
Recruitment
92-003630
Trophic Relationships
92-003630
Misgurnus anguillicaudatus
Age/Growth
92-002877
Chemoreception
92-003569
Chromosomes
92-002672
Early Development
92-002672
Fecundity
92-002877
Fish Attractants
92-003569
Herbicides
92-003447
Karyotypes
92-002671
Maturation
92-002877
Reproduction
92-002877
Spawning
92-002877
Tetraploidy
92-002671
92-002672
Triploid Fish
92-002671
Misgurnus dabryanus
Endocrinology
92-002639
Gonadotropin
92-002639
Testosterone
92-002639
Misgurnus fossilis
DNA
92-002688
Gene Transfer
92-002688
Growth Hormone
92-002688
Monopterus
Air Breathing
92-002483
Cardiovascular System
92-002483
Heart
92-002483
Metabolic Rates
92-002483
Monopterus albus
Heart
92-002523

...CONTINUED...
Monopterus albus
Peptides
92-002523
Mora moro
Morphometry
92-003110
Species Identification
92-003110
Morone
Nursery Areas
92-003674
Morone americana
Endocrinology
92-002510
Hepatic Lesions
92-003224
Hepatic Neoplasms
92-003224
Histology
92-003175
Hormones
92-002510
Kudoa
92-003175
Liver
92-003175
Maturation
92-002510
Pancreas
92-003175
Parasites/Diseases
92-003175
92-003224
92-003225
Pauciconfibula subsolana
92-003225
Pollution
92-003224
Population Studies
92-003593
Protozoan Diseases
92-003175
Spleen
92-003175
Trematodes
92-003225
Morone chrysops
Activity Patterns
92-002839
Age/Growth
92-002132
92-002224
92-002727
Ammonia
92-003449
Amyloodinium ocellatum
92-003185
Brackishwater Culture
92-002176
Culture/Propagation
92-002132
92-002176
92-002224
92-002225
92-002727
92-003449
Diets
92-002225
Dinoflagellates
92-003185
Early Development
92-002224
Fatty Acids
92-002224

...CONTINUED...
Morone chrysops
Feeding Experiments
92-002176
92-002224
Feeds
92-002224
Food Conversion Efficiency
92-002132
Growth Hormone
92-002627
Hybridization
92-002132
92-002176
92-002224
92-002225
92-002627
92-002727
92-002839
92-003185
Larvae
92-002224
Movements
92-002839
Nitrite
92-003449
Nutrition
92-002224
92-002225
Parasites/Diseases
92-003185
Production
92-002132
Protozoan Diseases
92-003185
Salinity
92-002176
Survival
92-002132
92-002224
92-002727
Water Quality
92-003449
Morone saxatilis
Activity Patterns
92-002839
Age/Growth
92-002132
92-002224
92-002727
Amino Acids
92-002186
Ammonia
92-003449
Amyloodinium ocellatum
92-003185
Biosorption
92-003284
92-003294
Brackishwater Culture
92-002176
Carcass Traits
92-002182
Commercial Fishing
92-003459
Culture/Propagation
92-002120
92-002126
92-002127
92-002132
92-002173
92-002176
92-002177
92-002182
...CONTINUED...
Morone saxatilis
Culture/Propagation
92-002186
92-002195
92-002203
92-002211
92-002224
92-002225
92-002228
92-002254
92-002271
92-002718
92-002727
92-003449
92-003466
Diets
92-002177
92-002182
92-002186
92-002225
Dinoflagellates
92-003185
Early Development
92-002224
Fatty Acids
92-002182
92-002224
Feeding Experiments
92-002176
92-002177
92-002203
92-002224
Feeds
92-002173
92-002195
92-002203
92-002211
92-002224
Fingerling Production
92-002211
92-002271
Food Conversion Efficiency
92-002120
92-002132
92-002182
Genetics
92-002718
Gonadotropin
92-002524
92-002626
92-002631
Growth Hormone
92-002627
92-002631
Harvest
92-002906
92-003503
Hatchery/Wild Populations
92-002718
Hormones
92-002425
92-002524
92-002626
Hybridization
92-002132
92-002176
92-002224
92-002225
92-002627
92-002727
92-002839
92-003185
Induced Maturation
92-002126

...CONTINUED...
Morone saxatilis
Induced Maturation
92-002425
92-002524
92-002626
Invertebrate Forage
92-002173
92-002195
92-002228
Larvae
92-002126
92-002173
92-002195
92-002224
92-002228
Management/Research--General
92-003459
92-003460
92-003466
Management/Research--Marine
92-003503
Management/Research--Reservoirs
92-003701
Management/Research--Rivers and Streams
92-003668
Maturation
92-002425
92-002634
Movements
92-002839
92-003668
Nitrite
92-003449
Nutrition
92-002182
92-002186
92-002224
92-002225
Parasites/Diseases
92-003185
Photoperiodism
92-002425
Pituitary Gland
92-002631
Pollution
92-003294
Polychlorinated Biphenyls
92-003284
92-003294
Pond Culture
92-002120
Population Studies
92-002906
92-003466
92-003593
92-003668
Production
92-002120
92-002132
Protozoan Diseases
92-003185
Regulations/General
92-003459
Restoration of Anadromous Runs
92-003459
92-003668
Salinity
92-002176
Selenium
92-003342
Site Suitability
92-002127

...CONTINUED...
Morone saxatilis
Spawning Cycle Regulation
92-002254
92-002425
Sportfishing
92-003701
Stock Assessment
92-003284
Stock Identification
92-002718
Supplemental Stocking
92-002718
92-003459
92-003460
Survival
92-002132
92-002224
92-002727
Swimbladder
92-003342
Tank Culture
92-002271
Thermoregulation
92-002425
Vitellogenin
92-002634
Water Quality
92-003449
Mugil capito
Predator/Prey Relationships
92-002977
Recruitment
92-002977
Mugil cephalus
Age/Growth
92-003018
Condition Factors
92-002474
Culture/Propagation
92-002163
92-002542
Distribution/Geographical
92-003063
Dominance
92-003018
Fatty Acids
92-002474
Hatchery Releases
92-003549
Induced Maturation
92-002163
Lipid Content
92-002474
Management/Research--Marine
92-003549
Mark/Recapture
92-003549
Maturation
92-002542
Predator/Prey Relationships
92-002977
Recruitment
92-002977
Reproduction
92-002542
Season
92-003018
Spawning
92-002542
Supplemental Stocking
92-003549
Survival
92-003549

Mugil saliens
Evolution
92-002555
Proteins
92-002555
Mugilidae
Bacterial Diseases
92-003147
Dentition
92-002352
Mouth Parts
92-002352
Musculature
92-002352
Parasites/Diseases
92-003147
Pasteurella piscicida
92-003147
Pharynx
92-002352
Muraenidae
Reproductive System
92-002346
Mustelus canis
Amino Acids
92-002545
Glucose
92-002545
Metabolism
92-002545
Myctophidae
Distribution/Seasonal
92-002969
Myripristis jacobus
Distribution/Geographical
92-002955
Distribution/Vertical
92-002955
Habitat Selection
92-002955
Mystus macropterus
Age/Growth
92-002398
Early Development
92-002398
Myxine glutinosa
Fish Skins
92-003749
Management/Research--Marine
92-002903
Population Studies
92-002903
Stock Assessment
92-002903
Nanichthys simulans
Larval Drift
92-003742
Recruitment
92-003742
Negaprion brevirostris
Activity Patterns
92-002965
Age/Growth
92-003525
Aquariums
92-002248
Culture/Propagation
92-002248
Distribution/Geographical
92-002965
Habitat Selection
92-002965
Marking/Tagging/Microtags
92-003525

...CONTINUED...

Negaprion brevirostris
Mortality Factors
92-002248
Photoperiodism
92-002965
Water Quality
92-002248
Neoceratodus forsteri
Aquariums
92-002240
Culture/Propagation
92-002240
Evolution
92-002724
Reproduction
92-002240
RNA
92-002724
Neogobius bathybius
Osteology
92-002378
Species Identification
92-002378
Taxonomy
92-002378
Neogobius fluviatilis
Osteology
92-002378
Species Identification
92-002378
Taxonomy
92-002378
Neogobius melanostomus
Osteology
92-002378
Species Identification
92-002378
Taxonomy
92-002378
Neoharriotta
Teeth
92-002340
Nerophis maculatus
Distribution/Geographical
92-003049
Nezumia bairdi
Diclodophora nezumiae
92-003260
Habitat Selection
92-002776
Management/Research--Marine
92-002776
Microhabitat
92-002776
Parasites/Diseases
92-003260
Trematodes
92-003260
Noemacheilus barbatulus
Biomass
92-003686
Management/Research--Rivers and Streams
92-003686
Trophic Relationships
92-003686
Notemigonus crysoleucas
Biosorption
92-003388
Foods/Feeding
92-002833
Habitat Evaluation
92-003677

...CONTINUED...
Notemigonus crysoleucas
Hybridization
92-002684
92-002734
Karyotypes
92-002734
Management/Research--Rivers and Streams
92-003677
Meristic Studies
92-002684
Movements
92-002833
Parasites/Diseases
92-003257
Polychlorinated Biphenyls
92-003388
Notesthes robusta
Aquariums
92-002244
Life History/General
92-002244
Notopterus notopterus
Cadmium
92-003366
Digestive System
92-003366
Techniques/Microscopy
92-003366
Nototheniidae
Electrophoresis
92-002756
Notropis
Brain
92-002356
Nervous System
92-002356
Notropis baileyi
Parasites/Diseases
92-003271
Notropis chlorocephalus
Distribution/Geographical
92-003072
Evolution
92-003072
Taxonomy
92-003072
Zoogeography
92-003072
Notropis girardi
Distribution/Geographical
92-002910
Management/Research--Rivers and Streams
92-002910
Population Studies
92-002910
Notropis hudsonius
Habitat Selection
92-003682
Notropis lutipinnis
Distribution/Geographical
92-003072
Evolution
92-003072
Taxonomy
92-003072
Zoogeography
92-003072
Notropis lutrensis
Herbicides
92-003348
Oxadiazon
92-003348

...CONTINUED...
Notropis lutrensis
Sediment Bioassays
92-003348
Notropis maculatus
Nursery Areas
92-003674
Notropis procne
Habitat Selection
92-003682
Notropis rubellus
Habitat Selection
92-003682
Notropis spilopterus
Coloration
92-002710
Crypsis
92-002710
Notropis texanus
Habitat Evaluation
92-003677
Management/Research--Rivers and Streams
92-003677
Notropis zonistius
Parasites/Diseases
92-003271
Noturus gilberti
Coexistence
92-002883
Habitat Evaluation
92-002883
Habitat Selection
92-002883
Life History/General
92-002883
Management/Research--Rivers and Streams
92-002883
Reproduction
92-002883
Noturus nocturnus
Distribution/Geographical
92-003057
Odontaspis taurus
Abnormalities
92-002387
Kidneys
92-002387
Life History/General
92-003080
Mortality Rates
92-003080
Population Studies
92-003080
Recruitment
92-003080
Oligocottus maculosus
Alarm Reaction
92-002804
Chemoreception
92-002804
Fright Behavior
92-002804
Oncorhynchus
Culture/Propagation
92-002289
Environmental Impacts
92-002766
Extinction
92-003793
Fish Counters
92-003771
Habitat Alterations
92-003793

...CONTINUED...
Oncorhynchus
Hatchery/Wild Populations
92-002766
Hybridization
92-002766
Management/Research--Rivers and Streams
92-003793
Net-Pen Culture
92-002289
Parr-Smolt Transformation
92-002289
Raceway Culture
92-002289
Stocking/Introductions
92-002766
Supplemental Stocking
92-003550
Survival
92-003550
Weirs
92-003771
Oncorhynchus clarki
Acoustical Methods
92-002968
Activity Patterns
92-002968
Age/Growth
92-003024
Condition Factors
92-003024
Distribution/Vertical
92-002968
Foods/Feeding
92-002842
Larval Identification
92-003777
Management/Research--Reservoirs
92-003024
Population Studies
92-002968
Predator/Prey Relationships
92-002842
Spectrometry
92-003777
Oncorhynchus clarki bouvieri
DNA
92-002704
92-002705
Genetic Strains
92-002704
92-002705
Hybridization
92-002704
92-002705
Meristic Studies
92-002704
Mitochondria
92-002704
92-002705
Oncorhynchus clarki clarki
Aggressive Behavior
92-002826
Dominance
92-002826
Foods/Feeding
92-002826
Habitat Selection
92-002826
Intraspecies Relationships
92-002826
Oncorhynchus clarki lewisi
DNA
92-002704

...CONTINUED...
Oncorhynchus clarki lewisi
DNA
92-002705
Genetic Strains
92-002704
92-002705
Hybridization
92-002704
92-002705
Meristic Studies
92-002704
Mitochondria
92-002704
92-002705
Oncorhynchus clarki pleuriticus
Habitat Evaluation
92-003654
Management/Research--Rivers and Streams
92-003654
Microhabitat
92-003654
Nursery Areas
92-003654
Oncorhynchus gorbuscha
Allozymes
92-002725
Behavior
92-003564
Catch Per Unit Effort
92-003564
Dermocystidium salmonis
92-003250
Early Development
92-002676
Electrophoresis
92-002726
Escapement
92-003496
92-003499
92-003507
Gear Efficiency
92-003564
Genetic Diversity
92-002726
Harvest
92-003496
92-003499
92-003507
Heterozygosity
92-002676
92-002725
Morphology
92-002725
Nets/Gill Nets
92-003564
Parasites/Diseases
92-003250
Photoperiodism
92-003564
Population Genetics
92-002726
Population Studies
92-003496
92-003507
Season
92-003564
Species Identification
92-003099
Survival
92-002676
Thermal Tolerance
92-002676

...CONTINUED...
Oncorhynchus gorbuscha
Trematodes
92-003250
Oncorhynchus keta
Antigens
92-003157
Bacterial Diseases
92-003157
Behavior
92-003564
Carcass Traits
92-002663
Catch Per Unit Effort
92-003564
Culture/Propagation
92-002089
Diagnostic Techniques
92-003157
DNA
92-002711
Economic Value
92-002089
Erythrocytic Necrosis Virus
92-003202
Escapement
92-002918
92-003496
92-003499
92-003507
Gear Efficiency
92-003564
Harvest
92-002918
92-003496
92-003499
92-003507
Hematology
92-003202
Management/Research--Marine
92-002918
Mitochondria
92-002711
Musculature
92-002663
Nets/Gill Nets
92-003564
Parasites/Diseases
92-003157
92-003202
Photoperiodism
92-003564
Population Genetics
92-002711
Population Studies
92-003496
92-003507
Production
92-002089
Renibacterium salmoninarum
92-003157
Reproductive Cycle
92-002663
Season
92-003564
Species Identification
92-003099
Stock Assessment
92-002918
Stock Identification
92-002711
Viral Diseases
92-003202
Oncorhynchus kisutch
Abundance/Factors of
92-003475

...CONTINUED...
Oncorhynchus kisutch
Aeromonas salmonicida
92-003153
Age/Growth
92-002737
Antibodies
92-003126
Antigens
92-003126
Bacterial Diseases
92-003126
92-003153
92-003159
92-003165
92-003166
Cage Culture
92-002110
92-003114
Canopy
92-003475
Culture/Propagation
92-002063
92-002089
92-002093
92-002103
92-002110
92-003114
92-003539
Disease Susceptibility
92-003199
Economic Value
92-002089
92-002110
Egg Collection
92-002080
Egg Production
92-002103
Escapement
92-002918
92-003496
92-003499
92-003507
Flexibacter psychrophilus
92-003166
Foods/Feeding
92-002788
Gill Parasites
92-003114
Glucose
92-002586
Growth Hormone
92-002460
Growth Stimulants
92-002737
Habitat Selection
92-002959
Harvest
92-002918
92-003496
92-003499
92-003507
Hatchery Releases
92-003539
Hatchery/Wild Populations
92-003542
Hybridization
92-003199
Immune Response
92-003126
92-003153
Immunization
92-003153
Insulin
92-002460

...CONTINUED...
Oncorhynchus kisutch
Insulin
92-002490
92-002586
Lesions
92-003165
Life History/General
92-002959
Liver
92-002490
92-002586
Management/Research--Marine
92-002918
Management/Research--Rivers and Streams
92-003475
92-003542
Microhabitat
92-003475
Migration
92-003159
Mortality Factors
92-002586
Nursery Areas
92-002959
92-003475
Ocean Ranching
92-002063
Parasites/Diseases
92-003114
92-003126
92-003153
92-003159
92-003165
92-003166
92-003199
Parr-Smolt Transformation
92-002586
Population Studies
92-003496
92-003507
Production
92-002063
92-002089
92-002103
92-002110
92-003539
Renibacterium salmoninarum
92-003126
92-003159
Restoration of Anadromous Runs
92-003542
Riparian Habitat
92-003475
RNA
92-002460
Salinity
92-002586
Species Identification
92-003099
Stock Assessment
92-002918
Stocking/Introductions
92-003542
Supplemental Stocking
92-002093
92-003539
92-003542
Triploid Fish
92-002737
Vibrio anguillarum
92-003165
Viral Diseases
92-003199

...CONTINUED...
Oncorhynchus kisutch
Vision
92-002788
Water Quality
92-003114
Oncorhynchus masou
Behavior
92-002729
Brain
92-002407
Cestodes
92-003113
Courtship
92-002729
Culture/Propagation
92-002089
Economic Value
92-002089
Endocrinology
92-002407
Gonadotropin
92-002558
Helminths
92-003113
Hormones
92-002407
92-002558
Induced Maturation
92-002558
Kidneys
92-003173
Microsporidium takedai
92-003191
Myxidium
92-003173
Nematodes
92-003113
Parasites/Diseases
92-003113
92-003173
92-003191
Production
92-002089
Protozoan Diseases
92-003113
92-003173
92-003191
Species Identification
92-003099
Sperm
92-002558
Temperature
92-003191
Trematodes
92-003113
Triploid Fish
92-002729
Oncorhynchus mykiss
Abnormalities
92-002334
Abundance/Factors of
92-003475
Acidification
92-003359
Acoustical Methods
92-002968
Activity Patterns
92-002798
92-002968
Adrenaline
92-002832
Aeromonas
92-003160

...CONTINUED...
Oncorhynchus mykiss
Aeromonas salmonicida
92-003146
92-003150
92-003151
92-003160
Age/Growth
92-002064
92-002075
92-002085
92-002096
92-002109
92-002153
92-002169
92-002170
92-002179
92-002190
92-002218
92-002219
92-002459
92-002471
92-002552
92-002560
92-002575
92-002693
92-002740
92-002749
92-002935
92-003024
92-003029
92-003042
92-003324
92-003588
92-003612
Aggressive Behavior
92-002832
Aldicarb
92-003428
Aluminum
92-003359
Amino Acids
92-002190
92-002204
92-002467
92-002565
92-002990
Androgen
92-002761
Anemia
92-003124
Anesthetics
92-002540
Angiotensin
92-002461
Antibiotics
92-002439
92-002618
92-003349
Antibodies
92-002640
92-003169
92-003203
Antigens
92-002640
Arginine
92-002467
Ascorbic Acid
92-002559
ATP
92-002507
92-002604
Bacterial Diseases
92-002408

...CONTINUED...
Oncorhynchus mykiss
Bacterial Diseases
92-002498
92-003121
92-003124
92-003127
92-003136
92-003140
92-003142
92-003146
92-003150
92-003151
92-003154
92-003158
92-003159
92-003160
92-003169
Bacterial Kidney Disease
92-003158
Bile
92-002563
Biofiltration
92-002265
92-002277
Biological Monitoring
92-003375
92-003376
Biotelemetry
92-003524
Biotransformation
92-003358
92-003428
Bird Predation
92-003702
Brackishwater Culture
92-002066
92-002075
92-002084
92-002109
92-002572
Brood Stock
92-002065
92-002194
Cadmium
92-003337
92-003375
92-003376
Cage Culture
92-002066
92-002071
92-002075
92-002082
92-002153
92-003699
Calcium
92-002420
92-002563
Canopy
92-003475
Carbamates
92-003428
Carbohydrate Metabolism
92-002489
Carcass Traits
92-003750
Cardiovascular System
92-002541
92-002657
Carnosine
92-002404
Carotenoids
92-002572
92-002621

...CONTINUED...
Oncorhynchus mykiss
Catecholamines
92-002832
Cell Culture
92-002592
Cestodes
92-003261
Chloramphenicol
92-003349
Chromosomes
92-002764
Clearcutting
92-003481
Cloning
92-002761
Coexistence
92-003053
Coloration
92-002572
92-002621
Competition
92-003531
Condition Factors
92-002891
92-003024
Copper
92-003375
92-003376
Cortisol
92-002085
92-002096
92-002415
92-002617
92-003042
Culture/Propagation
92-002064
92-002065
92-002066
92-002071
92-002073
92-002075
92-002077
92-002078
92-002079
92-002082
92-002084
92-002085
92-002086
92-002087
92-002094
92-002096
92-002098
92-002099
92-002103
92-002105
92-002107
92-002109
92-002151
92-002169
92-002170
92-002180
92-002188
92-002189
92-002190
92-002191
92-002194
92-002204
92-002208
92-002218
92-002219
92-002220
92-002222
92-002254

...CONTINUED...
Oncorhynchus mykiss
Culture/Propagation
92-002265
92-002269
92-002275
92-002277
92-002294
92-002471
92-002572
92-002575
92-002621
92-002703
92-002714
92-002740
92-002749
92-003136
92-003207
92-003244
92-003531
92-003539
92-003588
92-003750
Cytochrome P450
92-003358
Cytophaga columnaris
92-003124
Diagnostic Techniques
92-003121
92-003142
92-003183
92-003203
92-003207
92-003210
Dibenzofuran
92-003445
Diets
92-002170
92-002179
92-002180
92-002188
92-002190
92-002208
92-002575
Digestive System
92-002430
92-002439
92-002486
92-002534
92-002552
92-002591
92-002616
92-002990
Dioxin
92-003445
Diphyllobothrium dendriticum
92-003261
Diploidization
92-002714
92-002743
Disease Susceptibility
92-003199
Disease-Free Culture
92-002075
Distribution/Factors of
92-003053
Distribution/Vertical
92-002854
92-002968
DNA
92-002389
92-002688
Early Development
92-002334

...CONTINUED...
Oncorhynchus mykiss
Early Development
92-002560
92-002592
92-003324
92-003702
Economics
92-002107
Egg Production
92-002065
92-002103
92-002294
92-002471
Egg Quality
92-002065
Egg Size
92-002471
92-002935
Egg Survival
92-002935
Electrical Anesthesia
92-002540
Electrophoresis
92-002762
Endocrinology
92-002420
92-002463
Enteric Redmouth Disease
92-003136
Environmental Factors
92-002153
Environmental Impacts
92-002071
92-002082
92-002098
92-003531
92-003699
Enzymes
92-002466
92-002493
92-002534
92-002559
92-002643
92-002649
Epizootic Haematopoietic
Necrosis
92-003203
Escapement
92-002957
Estradiol
92-002563
92-002581
Eutrophication
92-002071
Evolution
92-002389
92-002555
Excretory System
92-002461
92-002563
Exercise
92-002466
92-002476
92-002657
Exotic Species
92-002721
Extracellular Fluid Volume
92-002564
Eyes
92-002334
Fatty Acids
92-002498
92-002573

...CONTINUED...
Oncorhynchus mykiss
Fecundity
92-002065
92-002465
92-002925
92-002935
Feeders
92-002169
92-002222
Feeding Experiments
92-002109
92-002169
92-002179
92-002190
92-002191
92-002220
92-002222
92-003588
Feeds
92-002170
92-002180
92-002189
92-002194
92-002204
92-002218
92-002219
92-002220
Fertilization
92-002275
92-002422
92-002769
Filtration Systems
92-002277
Fingerling Stocking
92-003531
Fish Counters
92-003771
Fish Freshness Testing
92-003748
Fish Hatchery Effluents
92-002071
92-002082
92-002098
Fish Passage
92-002957
Fishways
92-002957
Flexibacter psychrophilus
92-003154
Food Conversion Efficiency
92-002218
92-002539
92-002618
Food Digestibility
92-002170
92-002439
92-002618
92-002990
Food Technology
92-003748
Foods/Feeding
92-002179
92-002552
92-003053
92-003588
Fry Production
92-002208
Fungicides
92-003229
Furunculosis
92-003150
Gas Supersaturation
92-002189

...CONTINUED...
Oncorhynchus mykiss
Gas Supersaturation
92-003136
Gene Transfer
92-002688
92-002743
92-002748
92-002761
92-002769
Genetic Diversity
92-002703
92-002721
Genetic Markers
92-002761
Genetic Strains
92-002086
92-002087
92-002094
92-002721
Genetics
92-002703
92-002714
92-002740
Gills
92-002649
Glomerulonephritis
92-003158
Glucose
92-002463
92-002492
92-002604
92-002611
Gonosomatic Index
92-002925
Granule Cells
92-002591
Growth Hormone
92-002459
92-002573
92-002688
92-003042
Growth Stimulants
92-003042
Gynogenesis
92-002714
92-002761
Habitat Alterations
92-003481
Habitat Evaluation
92-003053
92-003681
92-003702
Habitat Selection
92-003053
92-003681
92-003702
Hatchery Releases
92-003531
92-003539
Hatchery/Wild Populations
92-002703
92-002764
92-003029
92-003531
Head
92-002334
Heart
92-002466
Heated Water
92-002094
Heavy Metals
92-003332
92-003361

...CONTINUED...
Oncorhynchus mykiss
Heavy Metals
92-003375
92-003376
Hematology
92-002507
92-002540
92-002541
92-002568
92-002643
Heterozygosity
92-002762
Histology
92-002465
Hormones
92-002269
92-002420
92-002446
92-002480
92-002617
92-002632
92-002633
Hybridization
92-003199
Hyperoxia
92-002541
Hypoxia
92-002568
Ichthyophthirius multifiliis
92-003193
Immune Response
92-002449
92-002498
92-003140
92-003142
92-003146
92-003158
92-003261
Immunization
92-002408
92-003151
Incubation
92-002269
Induced Maturation
92-002450
92-002480
Infectious Pancreatic Necrosis
92-003201
92-003207
92-003210
92-003211
Insulin
92-002446
92-002489
92-002490
92-003042
Ion Transport
92-002461
92-002482
92-002560
92-002564
Janthinobacterium
92-003124
Kidneys
92-002461
92-002617
92-003201
Laboratory Spawning
92-002269
Lactate Metabolism
92-002604
Land Use
92-003481

...CONTINUED...
Oncorhynchus mykiss
Leeches
92-003180
Life History/General
92-002077
Lipid Composition
92-002208
92-002498
Lipid Content
92-002446
92-003750
Lipid Metabolism
92-002204
92-002492
92-002493
92-002573
92-002611
Liver
92-002446
92-002490
92-002492
92-002493
92-002559
92-002573
92-002611
92-002617
92-002632
92-002633
92-003361
Malachite Green
92-003229
Management/Research--Reservoirs
92-003024
92-003702
Management/Research--Rivers and Streams
92-002798
92-003053
92-003475
92-003481
92-003681
Marketing
92-002084
Marking/Tagging
92-003524
Masculinization
92-002714
Maturation
92-002153
92-002421
92-002465
92-002693
92-002891
Mercury
92-003332
92-003361
Metabolism
92-002467
92-002560
Metallothionein
92-003332
92-003361
Microhabitat
92-002798
92-003475
92-003681
Migration
92-002957
92-003159
Modeling
92-003588
Mortality Factors
92-003324

...CONTINUED...
Oncorhynchus mykiss
Musculature
92-002402
92-002466
92-002476
92-002489
92-002540
92-002592
92-002617
92-003750
Myxobolus cerebralis
92-003178
92-003183
92-003184
Nervous System
92-002430
92-002591
Net-Pen Culture
92-002169
Nursery Areas
92-003475
Nutrition
92-002190
92-002194
92-002204
92-002208
92-002218
92-002219
92-002467
92-002498
92-002565
92-002575
92-002611
92-002618
92-002990
92-003042
Nutritional Diseases
92-003244
Ocean Ranching
92-002073
Organophosphates
92-003351
Osmoregulation
92-002151
92-002420
92-002508
92-002560
92-002649
Overwintering
92-002798
Oxolinic Acid
92-003127
92-003140
Oxygen
92-002087
92-002482
92-002539
92-002604
Oxygenation
92-002086
92-002087
92-002189
92-002254
92-002277
92-003136
Pancreas
92-002463
Parasites/Diseases
92-002408
92-002449
92-002498
92-003121
92-003124

...CONTINUED...
Oncorhynchus mykiss
Parasites/Diseases
92-003127
92-003136
92-003140
92-003142
92-003146
92-003150
92-003151
92-003154
92-003158
92-003159
92-003160
92-003169
92-003174
92-003178
92-003180
92-003183
92-003184
92-003193
92-003199
92-003201
92-003203
92-003210
92-003211
92-003229
92-003244
92-003261
Pentachlorophenol
92-003440
Peptides
92-002404
92-002461
92-002463
Pesticides
92-003428
pH Regulation
92-002402
92-002564
Pharmacology
92-002429
Phenols
92-003337
92-003440
Phosphate
92-002559
92-002604
Photoperiodism
92-002294
92-002450
92-002508
92-002581
Pigmenters
92-002572
92-002621
Pigments
92-002621
Piscicides
92-003358
Ploidy Levels
92-002269
Pollution
92-003121
Polychlorinated Biphenyls
92-003445
Polymorphism
92-002764
Polyploidy
92-002740
Pond Culture
92-002220
Population Genetics
92-002703

...CONTINUED...
Oncorhynchus mykiss
Population Genetics
92-002721
92-002762
92-002764
Population Studies
92-002891
92-002957
92-002968
92-003324
Predator/Prey Relationships
92-003702
Production
92-002073
92-002079
92-002084
92-002094
92-002103
92-002105
92-002107
92-003539
Proliferative Kidney Disease
92-003174
Prostaglandins
92-002568
Protein Metabolism
92-002204
92-002575
92-002616
Proteinase Inhibitors
92-002990
Proteins
92-002219
92-002555
Protozoan Diseases
92-003174
92-003178
92-003180
92-003183
92-003184
92-003193
Pulp Mill Effluents
92-003324
Raceway Culture
92-002254
92-002277
Rearing Density
92-002085
92-002086
92-002087
Recirculating Systems
92-002105
92-002265
92-002277
Renibacterium salmoninarum
92-003142
92-003158
92-003159
Reproduction
92-002096
92-002421
Reproductive Cycle
92-002450
92-002925
Reproductive System
92-002465
Respiratory System
92-002482
Riparian Habitat
92-003475
92-003481
Rotenone
92-003358

...CONTINUED...
Oncorhynchus mykiss
Salinity
92-002151
92-002560
92-002649
Sampling
92-003619
Schooling Behavior
92-002832
Season
92-002075
92-002450
Sedimentation
92-002071
Selective Breeding
92-002096
92-002712
92-002762
Sex Determination
92-002421
Sexual Precocity
92-002891
Site Suitability
92-002066
Social Behavior
92-002832
Spawning
92-003681
Spawning Cycle Regulation
92-002065
92-002099
92-002294
92-002581
Spawning Techniques
92-002099
92-002275
Species Identification
92-002389
Sperm
92-002275
92-002422
92-002538
92-002640
92-002769
Spermatogenesis
92-002421
Starvation
92-002563
Steroids
92-003042
Stock Identification
92-002703
Stocking/Introductions
92-002721
92-003531
Storage Effects
92-003748
Streptococcus
92-002429
Stress
92-002085
92-002096
92-002415
92-002539
92-002540
Supplemental Stocking
92-003539
92-003550
Surfactants
92-003415
Survival
92-002096
92-002740

...CONTINUED...
Oncorhynchus mykiss
Survival
92-003550
Taxonomy
92-002389
Techniques/Ploidy Levels
92-002714
92-002761
Temperature
92-002064
92-002066
92-002075
92-002109
92-002188
92-002402
92-002459
92-002854
92-003481
Temperature Selection
92-002854
Testosterone
92-002581
Tetraploidy
92-002761
Thermal Tolerance
92-002484
Thermoregulation
92-002854
Thyroid Gland
92-002632
92-002633
Thyroxine
92-002617
92-002632
92-002633
92-003042
Treatment
92-002429
92-003127
92-003140
Triploid Fish
92-002714
92-002743
92-002761
Trypanosoma catostomi
92-003180
Ulcers
92-003121
Vaccination
92-003154
Vibrio anguillarum
92-003160
92-003169
Viral Diseases
92-003199
92-003201
92-003203
92-003207
92-003210
92-003211
Viral Hemorrhagic Septicemia
92-003201
Vitamins
92-003244
Water Quality
92-002066
92-002071
92-002082
92-002189
Weirs
92-003771
Xanthates
92-003337

...CONTINUED...
Oncorhynchus mykiss
Yersinia ruckeri
92-002408
92-002498
92-003136
92-003142
92-003160
Oncorhynchus nerka
Age/Growth
92-003019
Behavior
92-003564
Catch Per Unit Effort
92-003564
Culture/Propagation
92-002089
Early Development
92-003019
Economic Value
92-002089
Escapement
92-002899
92-002900
92-002918
92-003496
92-003499
92-003501
92-003507
92-003652
Exploitation Rates
92-003501
Gear Efficiency
92-003564
Gear Selectivity
92-003501
Harvest
92-002918
92-003496
92-003499
92-003501
92-003507
Management/Research--Lakes
92-003652
Management/Research--Marine
92-002899
92-002900
92-002918
92-002919
Meristic Studies
92-002919
Migration
92-002920
Nets/Gill Nets
92-003501
92-003564
Nets/Netting
92-003501
Photoperiodism
92-003564
Population Studies
92-002899
92-002900
92-002920
92-003496
92-003507
Production
92-002089
Recruitment
92-002920
Scales
92-002892
92-002919
92-003019

...CONTINUED...
Oncorhynchus nerka
Season
92-003019
92-003564
Spawning Migration
92-002899
92-002900
Species Identification
92-003099
Stock Assessment
92-002918
92-002919
92-002920
92-003652
Stock Identification
92-002892
92-002919
Oncorhynchus rhodurus
Condition Factors
92-002472
Early Development
92-002472
Lipid Composition
92-002472
Parr-Smolt Transformation
92-002472
Oncorhynchus tshawytscha
Age/Growth
92-002560
Antibodies
92-003126
92-003172
Antigens
92-003126
Bacterial Diseases
92-003126
92-003156
92-003159
Bacterial Kidney Disease
92-003156
Brood Stock
92-003156
Carcass Traits
92-003762
Culture/Propagation
92-002063
92-002073
92-002089
92-002093
92-002103
92-002254
92-002270
92-003539
92-003762
Dermocystidium salmonis
92-003250
Diagnostic Techniques
92-003156
Disinfection
92-002270
Early Development
92-002560
Economic Value
92-002089
Egg Production
92-002103
92-002254
92-002270
Egg Survival
92-002948
Escapement
92-002918
92-002957

...CONTINUED...
Oncorhynchus tshawytscha
Escapement
92-003496
92-003499
92-003507
Fish Passage
92-002957
Fishways
92-002957
Flow Regimes
92-002948
Fungal Diseases
92-003172
Gonadotropin
92-002660
Harvest
92-002918
92-003496
92-003499
92-003507
Hatchery Releases
92-002503
92-003539
Hatchery/Wild Populations
92-003542
92-003762
Herpesvirus salmonis
92-003200
Immune Response
92-003126
Ion Transport
92-002560
Lunar Influences
92-002503
Management/Research--Marine
92-002918
Management/Research--Rivers and Streams
92-003542
Marketing
92-003762
Metabolism
92-002560
Migration
92-002957
92-003159
Nests/Nesting
92-002948
Ocean Ranching
92-002063
92-002073
Oncorhynchus Masou Virus
92-003200
Osmoregulation
92-002560
Parasites/Diseases
92-003126
92-003156
92-003159
92-003172
92-003200
92-003250
Parental Transfer
92-003156
Parr-Smolt Transformation
92-002503
Population Studies
92-002957
92-003496
92-003507
Production
92-002063
92-002073

...CONTINUED...
Oncorhynchus tshawytscha
Production
92-002089
92-002103
92-003539
Renibacterium salmoninarum
92-003126
92-003156
92-003159
Restoration of Anadromous Runs
92-003542
Rickettsia
92-003172
RNA
92-002660
Salinity
92-002560
Spawning Substrates
92-002948
Species Identification
92-003099
Stock Assessment
92-002918
Stocking/Introductions
92-003542
Supplemental Stocking
92-002093
92-003539
92-003542
Survival
92-002503
Temperature Selection
92-003764
Thermal Tolerance
92-003764
Thyroxine
92-002503
Trematodes
92-003250
Viral Diseases
92-003200
Ophicephalus argus
Heart
92-002523
Peptides
92-002523
Ophicephalus obscurus
Age/Growth
92-002148
Culture/Propagation
92-002148
Fecundity
92-002148
Feeding Experiments
92-002148
Reproduction
92-002148
Ophicephalus punctatus
Aeromonas hydrophila
92-003128
Bacteria
92-002133
Bacterial Diseases
92-003128
Culture/Propagation
92-002133
Disease Susceptibility
92-003128
Parasites/Diseases
92-002133
92-003128
92-003186
Pollution
92-003128

...CONTINUED...
Ophicephalus punctatus
Protozoan Diseases
92-003186
Sewage Effluents
92-002133
Trypanosoma punctati
92-003186
Water Quality
92-002133
Ophidion scrippsae
Age/Growth
92-003023
Opistognathus
Life History/General
92-002880
Opistognathus macrognathus
Behavior
92-002870
Habitat Selection
92-002870
Life History/General
92-002870
Opsanus tau
Brain
92-002620
Electrophoresis
92-002620
Eyes
92-002351
Histology
92-002351
Orectolobus maculatus
Foods/Feeding
92-002400
Jaws
92-002400
Oreonectes evezardi
Caves
92-002423
Endocrinology
92-002423
Metabolism
92-002423
Thyroxine
92-002423
Orthopristis chrysoptera
Artificial Reefs
92-003746
Management/Research--Marine
92-003746
Recruitment
92-003746
Oryzias latipes
Age/Growth
92-002845
Agonistic Behavior
92-002845
Behavior
92-002845
Benzo(a)pyrene
92-003377
Bioassay Techniques
92-003377
Biological Monitoring
92-003399
Bromide
92-003446
Carcinogens
92-003377
Competition
92-002845
DMBA
92-003377

...CONTINUED...
Oryzias latipes
Early Development
92-002374
92-003446
Egg Composition
92-002566
Endocrinology
92-002664
Endosulfan
92-003399
Enzymes
92-002664
Fecundity
92-003446
Hatching
92-002664
Hazardous Wastes
92-003399
Methylazoxymethanol Acetate
92-003377
Natural Selection
92-002845
Osteology
92-002374
Pesticides
92-003399
Proteins
92-002566
Osmerus eperlanus
Food Supply
92-003626
Management/Research--Lakes
92-003626
Trophic Relationships
92-003626
Oxyporhamphus micropterus
Fins
92-002338
Morphometry
92-002338
Species Identification
92-002338
Swimming Performance
92-002338
Oxyporhamphus micropterus similis
Larval Drift
92-003742
Recruitment
92-003742
Pagrus auratus
Gonadotropin
92-002577
Induced Maturation
92-002577
Maturation
92-002577
Steroids
92-002577
Pagrus major
Egg Composition
92-002662
Eggs
92-002662
Embryology
92-002662
Paralabrax clathratus
Heart
92-002532
Metabolic Rates
92-002532
Temperature
92-002532
Paralabrax maculatofasciatus
Heart
92-002532

...CONTINUED...
Paralabrax maculatofasciatus
Metabolic Rates
92-002532
Temperature
92-002532
Paralichthys californicus
Age/Growth
92-003022
Culture/Propagation
92-003546
Early Development
92-003022
Larvae
92-003546
Life History/General
92-002876
Population Studies
92-002888
Supplemental Stocking
92-003546
Survival
92-003022
Temperature
92-003022
Paralichthys dentatus
Age/Growth
92-003087
Condition Factors
92-002474
Fatty Acids
92-002474
Foods/Feeding
92-002783
Habitat Selection
92-002783
Lipid Content
92-002474
Management/Research--Estuaries
92-002783
Mortality Rates
92-003087
Niche Overlaps
92-002783
Nursery Areas
92-002783
Recruitment
92-003087
Temperature
92-003087
Paralichthys lethostigma
Foods/Feeding
92-002783
92-002974
Habitat Selection
92-002783
Management/Research--Estuaries
92-002783
Management/Research--Marine
92-002974
Niche Overlaps
92-002783
Nursery Areas
92-002783
Population Studies
92-002974
Predator/Prey Relationships
92-002974
Seagrass Beds
92-002974
Paralichthys microps
Lecithaster pacificum
92-003115
Parasites/Diseases
92-003115

...CONTINUED...
Paralichthys microps
Trematodes
92-003115
Paralichthys olivaceus
Ammonia
92-002157
Bacterial Diseases
92-003129
Cell Culture
92-003129
Culture/Propagation
92-002152
92-002156
92-002157
Edwardsiella tarda
92-003129
Egg Composition
92-002662
Eggs
92-002662
Embryology
92-002662
Feeding Experiments
92-002156
92-002157
Fertilization
92-002152
Induced Maturation
92-002152
Parasites/Diseases
92-003129
Photoperiodism
92-002152
Treatment
92-003129
Water Quality
92-002156
92-002157
Parapimelodus nigribarbis
Meristic Studies
92-003102
Morphometry
92-003102
Taxonomy
92-003102
Pelecus cultratus
Competition
92-002779
Foods/Feeding
92-002779
Interspecies Relationships
92-002779
Management/Research--Lakes
92-003642
Recruitment
92-003642
Sense Organs
92-002350
Taste Reception
92-002350
Yield
92-003642
Perca flavescens
Age/Growth
92-002511
92-003015
92-003024
92-003263
92-003264
92-003624
Catch Per Unit Effort
92-003631
Condition Factors
92-003024

...CONTINUED...
Perca flavescens
Condition Factors
92-003631
Cortisol
92-003383
Culture/Propagation
92-002125
Early Development
92-003648
Feeding Experiments
92-002125
Food Supply
92-003015
Foods/Feeding
92-002983
92-003015
92-003648
Gonosomatic Index
92-002511
Harvest
92-003631
Heavy Metals
92-003383
Leeches
92-003180
Management/Research--Lakes
92-003015
92-003624
92-003631
92-003648
Management/Research--Reservoirs
92-003024
Maturation
92-003263
Mercury
92-003383
Mortality Factors
92-003263
92-003264
Nematodes
92-003263
92-003264
Parasites/Diseases
92-003180
92-003263
92-003264
92-003271
Plankton
92-003648
Polychlorinated Biphenyls
92-003383
Polycyclic Aromatic Hydrocarbons
92-003383
Pond Culture
92-002125
Population Studies
92-003263
Production
92-003624
Protozoan Diseases
92-003180
Raphidascaris acus
92-003263
92-003264
Reproduction
92-002511
Starvation
92-002511
Stress
92-003383
Stunting
92-002511
Trophic Relationships
92-003015

...CONTINUED...
Perca flavescens
Trophic Relationships
92-003624
92-003648
Trypanosoma catostomi
92-003180
Zooplankton
92-003015
Perca fluviatilis
Acidification
92-003314
92-003645
Age/Growth
92-003566
92-003590
Antibodies
92-003203
Arsenic
92-003287
Biological Monitoring
92-003287
Cestodes
92-003218
Chromosomes
92-002730
Cobalt
92-003287
Culture/Propagation
92-002175
Diagnostic Techniques
92-003203
Distribution/Factors of
92-003316
Epizootic Haematopoietic
Necrosis
92-003203
Eutrophication
92-003316
Evolution
92-002555
Heavy Metals
92-003287
Invertebrate Forage
92-002175
Karyotypes
92-002730
Lesions
92-003182
Liming
92-003645
Management/Research--Lakes
92-003645
Management/Research--Marine
92-003590
Management/Research--Ponds
92-003688
Multispecies Management
92-003590
Myxobolus sandrae
92-003182
Nets/Fyke Nets
92-003566
Nets/Gill Nets
92-003590
Nets/Netting
92-003590
Nets/Pound Nets
92-003566
Parasites/Diseases
92-003182
92-003203
92-003218
Population Studies
92-003316

...CONTINUED...
Perca fluviatilis
Predator/Prey Relationships
92-003010
92-003688
Proteins
92-002555
Protozoan Diseases
92-003182
Pulp Mill Effluents
92-003316
Recruitment
92-003316
Regulations/Fishing Gear
92-003590
Sampling
92-003566
Scoliosis
92-003182
Sex Ratios
92-003566
Stock Assessment
92-003566
Tellurium
92-003287
Thallium
92-003287
Traps/Wire
92-003566
Vanadium
92-003287
Viral Diseases
92-003203
Percichthys trucha
Age/Growth
92-003021
Otoliths
92-003021
Percidae
Distribution/Geographical
92-003065
Population Studies
92-003065
Species Diversity
92-003065
Percina caprodes
Nursery Areas
92-003674
Percina roanoka
Coexistence
92-002883
Management/Research--Rivers and Streams
92-002883
Percina sciera
Distribution/Geographical
92-003057
Petromyzon marinus
Age/Growth
92-002831
Brain
92-002651
Competition
92-002831
Cytology
92-002339
Endocrinology
92-002651
Eyes
92-002339
Healing
92-002553
Hypothalamic-Hypophysial System
92-002651

...CONTINUED...
Petromyzon marinus
Interspecies Relationships
92-002831
Larval Behavior
92-002831
Metamorphosis
92-002339
Nervous System
92-002553
Predator/Prey Relationships
92-003007
Regeneration
92-002553
Petromyzontidae
Enzymes
92-002643
Hematology
92-002643
Phoxinus phoxinus
Biomass
92-003686
Biosorption
92-003368
Cadmium
92-003368
Heavy Metals
92-003368
Management/Research--Rivers and Streams
92-003686
Sense Organs
92-002350
Taste Reception
92-002350
Trophic Relationships
92-003686
Phyllorhinichthys micractis
Endocrinology
92-002375
Epidermis
92-002375
Histology
92-002375
Physiculus capensis
Morphometry
92-003110
Species Identification
92-003110
Physiculus helenaensis
Morphometry
92-003110
Species Identification
92-003110
Physiculus huloti
Morphometry
92-003110
Species Identification
92-003110
Physiculus karrerae
Morphometry
92-003110
Species Identification
92-003110
Physiculus maslowskii
Morphometry
92-003110
Species Identification
92-003110
Physiculus parini
New Species
92-003103
Physiculus sazonovi
New Species
92-003103

Pimelodus
Nematodes
92-003220
Parasites/Diseases
92-003220
Spirocamallanus freitasi
92-003220
Pimelodus maculatus
Nematodes
92-003220
Parasites/Diseases
92-003220
Spirocamallanus freitasi
92-003220
Pimephales notatus
Chromosomes
92-002733
Genetic Diversity
92-002733
92-003305
Habitat Selection
92-003682
Heavy Metals
92-003305
Population Genetics
92-003305
Species Identification
92-002733
Pimephales promelas
Amines
92-003410
Anilines
92-003398
Benzene
92-003398
Biosorption
92-003417
Chromosomes
92-002733
Copper
92-003417
Genetic Diversity
92-002733
Hardness
92-003417
Heavy Metals
92-003417
Industrial Wastes
92-003441
Nitrobenzene
92-003398
pH
92-003417
Species Identification
92-002733
Toxicity Testing
92-003274
92-003386
92-003398
Toxicology
92-003350
Pimephales tenellus
Chromosomes
92-002733
Genetic Diversity
92-002733
Species Identification
92-002733
Pimephales vigilax
Chromosomes
92-002733
Genetic Diversity
92-002733

...CONTINUED...

Pimephales vigilax
Nursery Areas
92-003674
Species Identification
92-002733
Platichthys flesus
Bacterial Diseases
92-003121
Biological Monitoring
92-003338
Carbamates
92-003338
Commercial Fishing
92-003706
Diagnostic Techniques
92-003121
Discarded Bycatch
92-003706
Enzymes
92-003338
Harvest
92-003706
Heavy Metals
92-003301
Management/Research--Estuaries
92-003301
92-003706
Mercury
92-003301
Organophosphates
92-003338
Parasites/Diseases
92-003121
Pesticides
92-003338
Pollution
92-003121
92-003301
Stress
92-003338
Ulcers
92-003121
Plecoglossus altivelis
Age/Growth
92-002567
92-003044
Culture/Propagation
92-002258
92-002567
Early Development
92-003044
Feeds
92-002567
Hormones
92-002258
92-002436
Induced Maturation
92-002258
92-002436
Lipid Content
92-002567
Migration
92-003044
Nutrition
92-002567
Spawning
92-002806
Survival
92-002806
Triploid Fish
92-002806
Plecoglossus altivelis altivelis
Landlocked Populations
92-002945

...CONTINUED...
Plecoglossus altivelis altivelis
Maturation
92-002945
Reproduction
92-002945
Spawning
92-002945
Plectropomus maculatus
Gill Parasites
92-003270
Parasites/Diseases
92-003270
Trematodes
92-003270
Trochopus plectropomi
92-003270
Pleuronectes americanus
Amino Acids
92-002583
Antifreeze Production
92-002438
92-002695
Brain
92-002527
Gene Transfer
92-002695
Gonadotropin
92-002527
Kidneys
92-002583
Pulp Mill Effluents
92-003390
Pleuronectes platessa
Biological Monitoring
92-003338
Carbamates
92-003338
Enzymes
92-002468
92-003338
Gonadotropin
92-002593
Growth Hormone
92-002593
Maturation
92-002593
Musculature
92-002468
Organophosphates
92-003338
Pesticides
92-003338
Pituitary Gland
92-002593
Stress
92-003338
Pleuronectiformes
Johanssonia arctica
92-003233
Leeches
92-003233
Life History/General
92-003473
Management/Research--Marine
92-003473
Parasites/Diseases
92-003233
Pleuronichthys ritteri
Life History/General
92-002876
Pleuronichthys verticalis
Life History/General
92-002876
Poecilia formosa
Cloning
92-002674
Gynogenesis
92-002674
Hybridization
92-002674
Poecilia latipinna
Cloning
92-002674
Condition Factors
92-002554
Food Supply
92-002554
Gynogenesis
92-002674
Hybridization
92-002674
Lipid Content
92-002554
Photoperiodism
92-002926
Reproductive Cycle
92-002926
Salinity
92-002554
Season
92-002926
Temperature
92-002554
Poecilia mexicana
Cloning
92-002674
Gynogenesis
92-002674
Hybridization
92-002674
Poecilia reticulata
Amines
92-003353
Anilines
92-003353
92-003354
Benzo(a)pyrene
92-003377
Bioaccumulation
92-003450
Bioassay Techniques
92-003377
Biosorption
92-003389
Biotransformation
92-003389
Carcinogens
92-003377
Chlorpyrifos
92-003450
Culture/Propagation
92-002741
Diazinon
92-003389
DMBA
92-003377
Estradiol
92-002648
Fertilization
92-002648
Genetics
92-002741
Insecticides
92-003450
Maturation
92-002648

...CONTINUED...
Poecilia reticulata
Methylazoxymethanol Acetate
92-003377
Organophosphates
92-003351
Population Genetics
92-002741
Pyrethroids
92-003419
Steroids
92-002648
Testosterone
92-002648
Tetrachlorobenzene
92-003353
Xenobiotics
92-003389
Poeciliopsis lucida
Cloning
92-003012
Foods/Feeding
92-003012
Poeciliopsis monacha
Cloning
92-003012
Evolution
92-002750
Foods/Feeding
92-003012
Genetic Diversity
92-002750
Hybridization
92-002750
Poeciliopsis occidentalis
Evolution
92-002750
Genetic Diversity
92-002750
Hybridization
92-002750
Polydactylus multiradiatus
Age/Growth
92-002885
Habitat Selection
92-002885
Nursery Areas
92-002885
Recruitment
92-002885
Polydactylus sexfilis
Carbohydrate Metabolism
92-002205
Culture/Propagation
92-002205
92-002206
Feeds
92-002205
92-002206
Food Conversion Efficiency
92-002205
92-002206
Lipid Metabolism
92-002205
Nutrition
92-002205
Polyodon
Early Development
92-002345
Evolution
92-002345
Jaws
92-002345
Polyodon spathula
Digestive System
92-002326

...CONTINUED...
Polyodon spathula
Early Development
92-002326
92-002327
Embryology
92-002365
Head
92-002327
Histology
92-002326
Sperm
92-002557
Sperm Preservation
92-002557
Polypterus
Early Development
92-002345
Evolution
92-002345
Jaws
92-002345
Pomacanthus arcuatus
Aquariums
92-002251
Taxonomy
92-002251
Pomacentridae
Early Development
92-002366
Jaws
92-002366
Mouth Parts
92-002366
Pomacentrus leucostictus
Ciguatera
92-002988
Public Health Problems
92-002988
Trophic Relationships
92-002988
Pomacentrus nigricans
Defensive Behavior
92-002796
Territorial Behavior
92-002796
Pomatomus saltatrix
Abundance/Factors of
92-002904
Age/Growth
92-002904
Management/Research--Marine
92-002904
Recruitment
92-002904
Pomatoschistus microps
Distribution/Geographical
92-003049
Pomatoschistus minutus
Nests/Nesting
92-002817
Territorial Behavior
92-002817
Pomatoschistus minutus elongatus
Habitat Selection
92-002949
Nests/Nesting
92-002949
Spawning
92-002949
Spawning Substrates
92-002949
Pomoxis
Abundance/Factors of
92-002908

...CONTINUED...
Pomoxis
Management/Research--Reservoirs
92-002908
Nursery Areas
92-002908
Population Studies
92-002908
Temperature
92-002908
Turbidity
92-002908
Water Level Fluctuations
92-002908
Year Class Strength
92-002908
Pomoxis annularis
Abundance/Factors of
92-003084
92-003516
92-003633
Age/Growth
92-002890
92-003027
92-003043
92-003083
92-003511
92-003633
Age/Length Composition
92-003027
Aquatic Plant Control
92-003083
Bioenergetics
92-002578
Foods/Feeding
92-002833
Habitat Evaluation
92-003684
Habitat Selection
92-002963
92-003684
Harvest
92-002890
92-002913
92-003511
92-003516
92-003633
Hooking/Handling Mortality
92-003575
Hybrid Fish
92-003689
Hybridization
92-003689
Length-Weight Relationships
92-003609
Management/Research--Ponds
92-003689
Management/Research--Reservoirs
92-002890
92-002913
92-003027
92-003084
92-003511
92-003516
92-003633
Management/Research--Rivers and Streams
92-003684
Marking/Tagging
92-002963
Metabolic Rates
92-002578
Movements
92-002833

...CONTINUED...
Pomoxis annularis
Movements
92-002963
Otoliths
92-003027
92-003043
Population Studies
92-002890
92-002913
92-003027
92-003083
92-003084
92-003516
92-003609
92-003633
92-003684
Recruitment
92-003083
92-003084
92-003633
92-003689
Regression Analysis
92-003609
Regulations/Catch Limits
92-003511
92-003516
Regulations/General
92-003633
Regulations/Size Limits
92-003511
92-003516
Reproduction
92-003689
Sportfishing
92-003689
Survival
92-002913
92-003084
Swimming Performance
92-002578
Telemetry
92-002963
Year Class Strength
92-003083
Pomoxis nigromaculatus
Abundance/Factors of
92-003084
92-003633
Age/Growth
92-003083
92-003633
Aquatic Plant Control
92-003083
Brood Stock
92-002142
Catch Per Unit Effort
92-003631
Condition Factors
92-003631
Cooling Reservoirs
92-002905
Culture/Propagation
92-002142
Feeding Experiments
92-002142
Fingerling Production
92-002142
Habitat Evaluation
92-003684
Habitat Selection
92-003684
Harvest
92-002901

...CONTINUED...
Pomoxis nigromaculatus
Harvest
92-002913
92-003631
92-003633
Hybrid Fish
92-003689
Hybridization
92-003689
Length-Weight Relationships
92-003609
Management/Research--Lakes
92-003631
Management/Research--Ponds
92-003689
Management/Research--Reservoirs
92-002901
92-002905
92-002913
92-003084
92-003633
Marking/Tagging
92-002901
Nursery Areas
92-003674
Population Studies
92-002901
92-002905
92-002913
92-003083
92-003084
92-003609
92-003633
92-003684
Power Plants
92-002905
Recruitment
92-002905
92-003083
92-003084
92-003633
92-003689
Regression Analysis
92-003609
Regulations/General
92-003633
Reproduction
92-003689
Sportfishing
92-003689
Survival
92-002913
92-003084
Year Class Strength
92-003083
Porichthys myriaster
Age/Growth
92-003023
Porichthys notatus
Bioluminescence
92-002457
92-002556
Eyes
92-002457
Photoreception
92-002457
Predator/Prey Relationships
92-002825
Vision
92-002556
Potamotrygonidae
Distribution/Geographical
92-003107
...CONTINUED...
Potamotrygonidae
Habitat Selection
92-003107
Prionotus stephanophrys
Age/Growth
92-003023
Pristobrycon
Anacanthorus
92-003267
Parasites/Diseases
92-003267
Trematodes
92-003267
Prognichthys gibbifrons
Larval Drift
92-003742
Recruitment
92-003742
Protopterus
Evolution
92-002998
Foods/Feeding
92-002998
Predator/Prey Relationships
92-002998
Protopterus aethiopicus
Hormones
92-002605
Pancreas
92-002605
Peptides
92-002605
Psetta maxima
Bothriocephalus gregarius
92-003258
Cestodes
92-003258
Parasites/Diseases
92-003258
Pseudocrenilabrus multicolor
Fertilization
92-002829
Parental Behavior
92-002829
Spawning
92-002829
Pseudorasbora parva
Early Development
92-002816
Mouth Parts
92-002816
Parasitic Behavior
92-002816
Psilodraco breviceps
Evolution
92-002397
Meristic Studies
92-002397
Osteology
92-002397
Seismosensory System
92-002397
Species Identification
92-002397
Pterois lunulata
Aquariums
92-002245
Culture/Propagation
92-002245
Reproduction
92-002245
Pterois volitans
Early Development
92-002515

...CONTINUED...
Pterois volitans
Embryology
92-002515
Pterolebias
Aquariums
92-002138
Culture/Propagation
92-002138
Pond Culture
92-002138
Pteronotropis
Brain
92-002356
Nervous System
92-002356
Ptychocheilus lucius
Endangered/Threatened Species
92-003798
92-003800
Larval Identification
92-003777
Laws/Law Enforcement
92-003800
Life History/General
92-003798
Management/Research--Rivers and Streams
92-003798
Marking/Tagging
92-003526
Spectrometry
92-003777
Ptychocheilus oregonensis
Habitat Evaluation
92-003684
Habitat Selection
92-003684
Management/Research--Rivers and Streams
92-003684
Population Studies
92-003684
Pungitius pungitius
Abnormalities
92-002683
Cestodes
92-003218
Evolution
92-002321
Morphology
92-002683
Osteology
92-002321
92-002683
Parasites/Diseases
92-003218
Spines
92-002683
Variation Studies
92-002321
Puntius amarus
Allozymes
92-002692
Taxonomy
92-002692
Variation Studies
92-002692
Puntius gonionotus
Culture/Propagation
92-002171
Feeding Experiments
92-002171
Fry Production
92-002171
...CONTINUED...
Puntius gonionotus
Hormones
92-002625
Induced Maturation
92-002625
Invertebrate Forage
92-002171
Parasites/Diseases
92-003188
Parasitic Behavior
92-003188
Piscinoodinium pillulare
92-003188
Protozoan Diseases
92-003188
Tank Culture
92-002171
Pygopristis
Anacanthorus
92-003267
Parasites/Diseases
92-003267
Trematodes
92-003267
Rachovia brevis
Distribution/Geographical
92-003071
Habitat Selection
92-003071
Population Studies
92-003071
Rachovia hummelincki
Distribution/Geographical
92-003071
Habitat Selection
92-003071
Population Studies
92-003071
Rachovia pyropunctata
Distribution/Geographical
92-003071
Habitat Selection
92-003071
Population Studies
92-003071
Raja clavata
Epidermis
92-002516
Raja erinacea
Embryology
92-002477
92-002531
Osmoregulation
92-002531
Respiratory System
92-002477
Raja radiata
Coexistence
92-002843
Foods/Feeding
92-002843
Rajiformes
Swimming Performance
92-002800
Rasbora borapetensis
Aquariums
92-002241
Reinhardtius hippoglossoides
Age/Growth
92-003036
Distribution/Geographical
92-002893
Electrophoresis
92-002893

...CONTINUED...
Reinhardtius hippoglossoides
Parasites/Diseases
92-003122
92-003196
Population Studies
92-002893
Protozoan Diseases
92-003196
Variation Studies
92-002893
Rhabdosargus haffara
Distribution/Geographical
92-003051
Exotic Species
92-003051
Rhamdia sapo
Acanthostomum gnerii
92-003252
Parasites/Diseases
92-003252
Trematodes
92-003252
Rhinichthys atratulus
Foods/Feeding
92-003622
Habitat Selection
92-003622
Rhinichthys cataractae
Habitat Selection
92-002830
Microhabitat
92-002830
Size Hierarchies
92-002830
Rhinichthys osculus
Culture/Propagation
92-002122
Laboratory Spawning
92-002122
Rhinichthys osculus nevadensis
Endangered/Threatened Species
92-003786
Mitigation
92-003786
Rhinobatos planiceps
Anoplocotyloides chorrillensis
92-003241
Anoplocotyloides papillatus
92-003241
Caballerocotyla australis
92-003241
Callorhynchocotyle marplatensis
92-003241
Parasites/Diseases
92-003241
Trematodes
92-003241
Rhinochimaera
Teeth
92-002340
Rhodeus ocellatus smithi
Life History/General
92-002879
Rhodeus sericeus
Sense Organs
92-002350
Taste Reception
92-002350
Rhyacichthys aspro
Histology
92-002373
Reproductive System
92-002373
Rivulus marmoratus
Hermaphroditism
92-002856
Management/Research--General
92-003468
Mosquito Control
92-003468
Population Studies
92-002856
Predator/Prey Relationships
92-003468
Sex Ratios
92-002856
Rutilus erythrophthalmus
Taxonomy
92-003111
Rutilus pigus virgo
Biological Indicators
92-003676
Habitat Evaluation
92-003676
Management/Research--Rivers and Streams
92-003676
Rutilus rutilus
Abundance/Factors of
92-002785
92-002815
92-003694
Acidification
92-003314
Age/Growth
92-002519
Ascorbic Acid
92-002448
Bioenergetics
92-002519
92-002848
Biosorption
92-003308
Bird Predation
92-002863
Branchial Basket
92-002395
Competition
92-002815
92-002863
Cooling Reservoirs
92-003694
Culture/Propagation
92-002175
Currents
92-002852
Distribution/Factors of
92-002815
92-003316
Early Development
92-002332
92-002448
92-002519
Electrophysiology
92-002455
Enzymes
92-002528
Eutrophication
92-003316
Exotic Species/Northern Ireland
92-002863
Exploitation Rates
92-003694
Eyes
92-002455
Fish Control/Removal
92-003641

...CONTINUED...
Rutilus rutilus
Food Conversion Efficiency
92-002519
92-002848
Food Supply
92-002519
Foods/Feeding
92-002519
92-002848
92-002857
92-002860
92-002864
Gill Rakers
92-002395
Intraspecies Relationships
92-002863
Invertebrate Forage
92-002175
Ion Transport
92-002607
92-002666
Kidneys
92-002607
Lake Renovation
92-003641
Larval Behavior
92-002860
Management/Research--Lakes
92-003641
Management/Research--Reservoirs
92-003694
Management/Research--Rivers and Streams
92-002785
Metabolic Rates
92-002528
Microhabitat
92-002785
Musculature
92-002528
92-002666
Nursery Areas
92-002785
Nutrition
92-002448
Orientation/Homing
92-002852
Osteology
92-002332
Polychlorinated Biphenyls
92-003308
Population Studies
92-003316
92-003641
Potassium
92-002607
92-002666
Predator/Prey Relationships
92-002815
92-002857
92-002860
92-002864
92-003010
Pulp Mill Effluents
92-003316
Recruitment
92-003316
Respiration
92-002528
Rheotropism
92-002852
RNA
92-002455

...CONTINUED...
Rutilus rutilus
Sense Organs
92-002350
Sodium
92-002607
92-002666
Stocking/Introductions
92-002863
Stress
92-002666
Survival
92-002848
Taste Reception
92-002350
Temperature
92-002607
Urban Runoff
92-003308
Vitamins
92-002448
Sabastes cheni
Morphometry
92-002323
Species Identification
92-002323
Salarias
Fish Lists/Keys
92-003091
Salarias segmentatus
New Species
92-003091
Salmo irideus
Fertilization
92-002587
Sperm
92-002587
Salmo marmoratus
Morphometry
92-002341
Osteology
92-002341
Salmo platycephalus
Distribution/Geographical
92-003066
Endangered/Threatened Species
92-003066
Salmo salar
Acidification
92-002313
92-003451
Aeromonas salmonicida
92-003134
92-003139
92-003146
Age/Growth
92-002104
92-002419
92-002809
92-002961
Aluminum
92-003418
Amoxicillin
92-003139
Androgen
92-002419
Antifreeze Production
92-002695
Ascorbic Acid
92-002551
Bacterial Diseases
92-003131
92-003134
92-003137

...CONTINUED...
Salmo salar
Bacterial Diseases
92-003139
92-003142
92-003146
92-003162
Bacterial Hemmorhagic Septicaemia
92-003134
Bioenergetics
92-002995
Biofiltration
92-002265
Brackishwater Culture
92-002074
92-002084
92-002267
92-002278
Brood Stock
92-002076
92-002194
Cage Culture
92-002091
92-003114
Carcass Traits
92-003195
92-003762
Cestodes
92-003218
Condition Factors
92-002613
92-002995
Culture/Propagation
92-002074
92-002076
92-002084
92-002089
92-002091
92-002102
92-002103
92-002104
92-002194
92-002255
92-002265
92-002267
92-002278
92-002288
92-002434
92-002499
92-002551
92-002590
92-002809
92-003114
92-003259
92-003762
Cytochrome P450
92-002481
Cytology
92-002382
Diagnostic Techniques
92-003134
92-003142
92-003162
Diets
92-002434
92-002590
Digestive System
92-002589
Disease Importation
92-003231
Drug Resistance
92-003137
Early Development
92-002419

...CONTINUED...
Salmo salar
Economic Value
92-002089
Egg Composition
92-002944
Egg Production
92-002103
Egg Quality
92-002944
Electrophoresis
92-002682
92-002691
Embryology
92-002376
Enzymes
92-002434
92-002468
92-002589
92-002628
Ergasilus labracis
92-003249
Fecundity
92-002944
Feeding Experiments
92-002499
92-002809
Feeds
92-002194
92-002590
Fins
92-002376
Fish Counters
92-003776
Fish Grading
92-002102
Fish Passage
92-003585
Fishways
92-003585
Food Conversion Efficiency
92-002434
Foods/Feeding
92-002499
92-002809
92-002995
Fry Production
92-002590
Furunculosis
92-003134
92-003139
Gas Bubble Disease
92-002533
Gas Supersaturation
92-002533
Gene Transfer
92-002695
Genetics
92-002076
92-003472
Gill Parasites
92-003114
92-003249
Glucose
92-002586
Gonads
92-002419
Granulomatosis
92-003162
Growth Hormone
92-002104
Gyrodactylus salaris
92-003231
Habitat Selection
92-002961

...CONTINUED...
Salmo salar
Hatchery/Wild Populations
92-002944
92-003231
92-003472
92-003762
Histology
92-002382
Hormones
92-002635
Immune Response
92-003142
92-003146
Induced Maturation
92-002584
92-002635
Induced Smoltification
92-002104
92-002584
Infectious Pancreatic Necrosis
92-003211
Insulin
92-002586
92-002628
Karyotypes
92-002708
Kudoa thyrsitis
92-003195
Length Frequencies
92-002102
Lights
92-003585
Liming
92-002313
Lipid Composition
92-002590
Lipid Content
92-002613
92-002995
Liver
92-002382
92-002481
92-002586
Mammal Predation
92-003002
Management/Research--Reservoirs
92-003697
Management/Research--Rivers and Streams
92-002313
92-003658
Marketing
92-002084
92-002091
92-003762
Marking/Tagging
92-002960
Maturation
92-002419
92-002499
Meristic Studies
92-002691
Metabolic Rates
92-002074
92-002255
Metallothionein
92-003451
Microhabitat
92-003658
Migration
92-002777
92-002960
92-002961

...CONTINUED...
Salmo salar
Migration
92-003585
Morphometry
92-002691
Mortality Factors
92-002586
Movements
92-002960
92-002961
Musculature
92-002468
Myopathy
92-003259
Nutrition
92-002194
92-002434
92-002590
Nutritional Diseases
92-002551
Orientation/Homing
92-002961
Osteology
92-003259
Overwintering
92-002995
Oxygen
92-002074
92-002255
92-002267
Oxytetracycline
92-003137
Pancreas Diseases
92-003259
Parasites/Diseases
92-002533
92-002551
92-003114
92-003131
92-003134
92-003137
92-003139
92-003142
92-003146
92-003162
92-003174
92-003195
92-003211
92-003218
92-003231
92-003249
92-003259
Parasitic Copepods
92-003249
Parr-Smolt Transformation
92-002104
92-002499
92-002584
92-002586
Peptides
92-002628
Photoperiodism
92-002102
92-002104
92-002809
Phototropism
92-003585
Polymorphism
92-002708
Population Genetics
92-002682
92-002691
92-002708

...CONTINUED...
Salmo salar
Population Studies
92-002961
Post-Impoundment Studies
92-003697
Production
92-002084
92-002089
92-002091
92-002103
Proliferative Kidney Disease
92-003174
Protozoan Diseases
92-003174
92-003195
Pseudomonas fluorescens
92-003134
Recirculating Systems
92-002265
92-002278
Renibacterium salmoninarum
92-003142
Reproductive Cycle
92-002635
Rhodococcus
92-003162
Salinity
92-002586
Sampling
92-003658
Scales
92-003774
Selective Breeding
92-002076
Sexual Precocity
92-002499
Smoking Fish
92-003195
Spawning
92-002777
Spawning Cycle Regulation
92-002635
Starvation
92-002628
92-002995
Stock Identification
92-003774
Stress
92-003259
Tank Culture
92-002074
92-002255
92-002267
Telemetry
92-002777
Temperature
92-002288
92-002499
92-002589
92-003418
Testosterone
92-002584
Treatment
92-003131
92-003137
92-003139
Trematodes
92-003231
Variation Studies
92-002691
Vibrio salmonicida
92-003131
92-003137

...CONTINUED...
Salmo salar
Viral Diseases
92-003211
Vitamins
92-002551
Water Quality
92-002255
92-002267
92-003114
Water Supply
92-002288
Watershed Management
92-003697
Yersinia ruckeri
92-003142
Salmo salar sebago
Aggressive Behavior
92-002858
Distribution/Seasonal
92-002858
Distribution/Vertical
92-002858
Foods/Feeding
92-002858
Fright Behavior
92-002858
Movements
92-002858
Population Studies
92-002858
Salmo trutta
Abnormalities
92-002334
Abundance/Factors of
92-003664
92-003680
Acidification
92-002313
92-003333
92-003429
Adrenergic System
92-002475
Age/Growth
92-002678
92-002961
92-003024
92-003028
92-003033
92-003075
92-003598
92-003653
Alkalinity
92-003033
Allozymes
92-002694
Aluminum
92-003429
Amino Acids
92-002475
Anodonta piscinalis
92-003219
Bank Revetment
92-003474
92-003660
Biosorption
92-003288
92-003341
Cesium
92-003288
92-003341
Cestodes
92-003218
Chloride Cells
92-002336

...CONTINUED...
Salmo trutta
Coexistence
92-003053
Competition
92-003547
Condition Factors
92-003024
Culture/Propagation
92-002083
92-002268
92-002703
Distribution/Factors of
92-003053
Early Development
92-002324
92-002334
Egg Production
92-002083
Embryology
92-002324
Environmental Impacts
92-003547
Enzymes
92-002468
Evacuation
92-003333
Eyes
92-002334
Fertilization
92-002268
Fish Control/Removal
92-003521
Fish Processing
92-003763
Fishways
92-003584
Foods/Feeding
92-003053
Genetic Diversity
92-002703
Genetic Strains
92-002678
Genetics
92-002703
92-003547
Gills
92-002336
Habitat Alterations
92-003480
92-003653
Habitat Evaluation
92-002922
92-003053
92-003480
92-003664
92-003666
Habitat Improvement/General
92-003474
92-003660
92-003680
Habitat Protection
92-003781
Habitat Selection
92-002922
92-002961
92-003053
Harvest
92-003504
92-003509
92-003653
92-003680
Hatchery Releases
92-003532

...CONTINUED...
Salmo trutta
Hatchery/Wild Populations
92-002426
92-002703
92-003075
92-003551
Head
92-002334
Hematology
92-002475
92-002501
Hybridization
92-003085
92-003547
Ichthyophthirius multifiliis
92-003193
Infectious Pancreatic Necrosis
92-003211
Life History/General
92-003781
Liming
92-002313
92-003628
Lipid Content
92-002426
Magnetic Fields
92-002268
Management/Research--Lakes
92-003628
Management/Research--Reservoirs
92-003024
92-003697
Management/Research--Rivers and Streams
92-002313
92-002896
92-002922
92-003053
92-003429
92-003474
92-003480
92-003504
92-003513
92-003521
92-003532
92-003551
92-003658
92-003660
92-003664
92-003666
92-003680
92-003781
Margaritifera margaritifera
92-003219
Microhabitat
92-003658
Migration
92-002872
92-002961
Mirex
92-003763
Mortality Factors
92-003085
Movements
92-002961
Musculature
92-002426
92-002468
Nests/Nesting
92-002927
92-003666
Nursery Areas
92-003666

...CONTINUED...
Salmo trutta
Orientation/Homing
92-002961
Otoliths
92-003033
Parasites/Diseases
92-003174
92-003193
92-003211
92-003218
92-003219
Parasitic Molluscs
92-003219
Pollution
92-003333
Polychlorinated Biphenyls
92-003763
Population Genetics
92-002703
Population Studies
92-002896
92-002922
92-002961
92-003429
Post-Impoundment Studies
92-003697
Predator/Prey Relationships
92-002792
92-003702
Proliferative Kidney Disease
92-003174
Protozoan Diseases
92-003174
92-003193
Public Health Problems
92-003763
Radiation
92-003288
92-003341
Regulations/Catch and Release
92-003504
92-003509
92-003513
92-003680
Regulations/Fishing Gear
92-003551
92-003680
Regulations/General
92-003653
Regulations/Size Limits
92-003513
Reproduction
92-003653
92-003666
Road Construction
92-003480
Salinity
92-002336
Sampling
92-003658
Scales
92-003033
Season
92-002501
Sedimentation
92-003480
Spawning
92-002922
92-002927
Spawning Substrates
92-002927
Sperm
92-002268

...CONTINUED...
Salmo trutta
Stock Identification
92-002703
92-002872
Stocking/Introductions
92-003521
92-003547
92-003551
Supplemental Stocking
92-003532
Survival
92-002678
92-002922
92-003075
92-003085
92-003532
92-003551
92-003666
Temperature
92-003480
Thermal Tolerance
92-002484
Triploid Fish
92-003085
Trophic Relationships
92-003628
Unio crassus
92-003219
Urban Fishing
92-003509
Variation Studies
92-002678
92-002694
92-002872
92-003075
Viral Diseases
92-003211
Watershed Management
92-003697
Salmo trutta fario
Management/Research--Rivers and Streams
92-003663
Marking/Tagging
92-003527
Stock Assessment
92-003663
Salmo trutta lacustris
Hooking/Handling Stress
92-003581
Management/Research--Rivers and Streams
92-003663
Nets/Trawls
92-003581
Stock Assessment
92-003663
Stress
92-003581
Salmo trutta marmoratus
Early Development
92-002324
92-002685
92-002752
Electrophoresis
92-002685
92-002752
Embryology
92-002324
Larval Identification
92-002752
Variation Studies
92-002685

Salmo trutta oxianus
Meristic Studies
92-002384
Morphometry
92-002384
Variation Studies
92-002384
Salmo trutta trutta
Management/Research--Rivers and Streams
92-003663
Stock Assessment
92-003663
Salmonidae
Aeromonas salmonicida
92-003125
92-003148
Age/Growth
92-002097
92-002179
Bacterial Diseases
92-003125
92-003130
92-003132
92-003148
Brackishwater Culture
92-002092
92-002100
Brood Stock
92-002092
Cage Culture
92-002070
92-002100
92-002106
Carcass Traits
92-003754
Competition
92-003547
Condition Factors
92-002665
Culture/Propagation
92-002037
92-002061
92-002062
92-002067
92-002069
92-002070
92-002081
92-002088
92-002090
92-002092
92-002097
92-002100
92-002101
92-002106
92-002108
92-002198
92-002217
Cytology
92-002342
Diets
92-002179
92-002217
Disease Control
92-002067
DNA
92-002677
Drug Resistance
92-003125
Economic Value
92-002037
Economics
92-002088

...CONTINUED...
Salmonidae
Enteric Redmouth Disease
92-003132
Environmental Impacts
92-002037
92-002106
92-003547
Exploitation Rates
92-003745
Feeding Experiments
92-002097
92-002179
Feeds
92-002198
92-002217
Fingerling Production
92-002069
Fish Hatchery Effluents
92-002106
Foods/Feeding
92-002179
92-002978
Genetics
92-002092
92-003547
Hatchery Design
92-002108
Hybridization
92-003547
Inbreeding
92-002090
Laws/Law Enforcement
92-002067
92-002070
92-002081
Management/Research--General
92-003465
Management/Research--Marine
92-003745
Marketing
92-002062
92-002070
92-002081
92-002088
92-002101
92-003754
Nets/Drift Nets
92-003565
Oxolinic Acid
92-003125
Parasites/Diseases
92-002061
92-002067
92-003125
92-003130
92-003132
92-003148
Photoreception
92-002342
Pineal Body
92-002342
Planning
92-002037
Population Genetics
92-002677
Predator/Prey Relationships
92-002978
Production
92-002061
92-002070
92-002081
92-002088
92-002100

...CONTINUED...
Salmonidae
Production
92-002101
Quinolone
92-003125
92-003148
Raceway Culture
92-002108
Red Mouth Disease
92-003130
Regulations/General
92-003745
Selective Breeding
92-002090
92-002092
Starvation
92-002097
Stocking/Introductions
92-003547
Swimming Performance
92-002665
Transportation
92-002232
Treatment
92-003125
92-003148
Vibrio anguillarum
92-003148
Vitamins
92-002198
Water Quality
92-002106
Yersinia ruckeri
92-003130
92-003132
92-003148
Salvelinus alpinus
Age/Growth
92-002064
92-002095
92-002658
Aggressive Behavior
92-002658
Amino Acids
92-002619
Ascorbic Acid
92-002448
Biosorption
92-003288
Brain
92-002658
Brood Stock
92-002709
Cardiovascular System
92-002709
Cesium
92-003288
Cestodes
92-003239
Crepidostomum metoecus
92-003239
Cryptocotyle lingua
92-003236
Culture/Propagation
92-002064
92-002089
92-002095
92-002709
Disease Susceptibility
92-003199
Distribution/Vertical
92-002854
DNA
92-002719

...CONTINUED...
Salvelinus alpinus
Dominance
92-002658
Early Development
92-002448
Economic Value
92-002089
Embryology
92-002619
Entomoda edwardsi
92-003239
Epidermis
92-002337
Eubothrium salvelini
92-003239
Exercise
92-002337
92-002440
Foods/Feeding
92-002993
Genetic Strains
92-002709
Genomes
92-002719
Hematology
92-002709
Histology
92-002337
Hybridization
92-003199
Ion Transport
92-002607
Kidneys
92-002607
Management/Research--Lakes
92-003634
Meristic Studies
92-002370
Molluscs
92-003236
Morphometry
92-002370
Nematodes
92-003239
Nutrition
92-002448
Parasites/Diseases
92-003174
92-003199
92-003236
92-003239
Parasitic Copepods
92-003239
Polymorphism
92-002719
92-002993
Population Genetics
92-002719
Potassium
92-002607
Production
92-002089
Proliferative Kidney Disease
92-003174
Protozoan Diseases
92-003174
Radiation
92-003288
Rearing Density
92-002095
Rhabdochona denudata
92-003239
Serotonin
92-002658

...CONTINUED...
Salvelinus alpinus
Social Behavior
92-002658
Sodium
92-002607
Stock Assessment
92-003634
Taxonomy
92-002370
Temperature
92-002064
92-002440
92-002607
92-002854
Temperature Selection
92-002854
Tetraonchus alaskensis
92-003239
Thermoregulation
92-002440
92-002854
Trematodes
92-003236
92-003239
Variation Studies
92-002709
Viral Diseases
92-003199
Vitamins
92-002448
Salvelinus confluentus
Distribution/Geographical
92-003096
Taxonomy
92-003096
Variation Studies
92-003096
Salvelinus fontinalis
Acidification
92-003278
92-003346
Age/Growth
92-002418
92-002736
92-003024
92-003026
Aluminum
92-003346
Bank Revetment
92-003474
92-003660
Calcium
92-003346
Coexistence
92-003053
Condition Factors
92-003024
Disease Susceptibility
92-003199
Distribution/Factors of
92-003053
Enzymes
92-002418
Fish Control/Removal
92-003521
Foods/Feeding
92-003053
Genetic Fitness
92-002736
Habitat Evaluation
92-003053
Habitat Improvement/General
92-003474

...CONTINUED...
Salvelinus fontinalis
Habitat Improvement/General
92-003660
Habitat Selection
92-003053
Hybridization
92-003085
92-003199
Liver
92-002418
Management/Research--Reservoirs
92-003024
Management/Research--Rivers and Streams
92-003053
92-003278
92-003474
92-003521
92-003660
Meristic Studies
92-002370
Migration
92-002954
Morphometry
92-002370
Mortality Factors
92-003085
Movements
92-002954
Nutrition
92-002418
Otoliths
92-003026
Parasites/Diseases
92-003199
Starvation
92-002418
Stocking/Introductions
92-003521
Stunting
92-003026
Survival
92-002736
92-003085
Taxonomy
92-002370
Thermal Tolerance
92-002484
Triploid Fish
92-003085
Variation Studies
92-002736
Viral Diseases
92-003199
Salvelinus leucomaenis
Aeromonas salmonicida
92-003144
Bacterial Diseases
92-003144
Immune Response
92-003144
Ozone
92-003360
Parasites/Diseases
92-003144
Salvelinus malma
Abundance/Factors of
92-003475
Canopy
92-003475
Distribution/Geographical
92-003096
Management/Research--Rivers and Streams
92-003475

...CONTINUED...
Salvelinus malma
Microhabitat
92-003475
Nursery Areas
92-003475
Riparian Habitat
92-003475
Taxonomy
92-003096
Variation Studies
92-003096
Salvelinus namaycush
Allozymes
92-002717
Amino Acids
92-002512
Competition
92-003531
Cortisol
92-002415
Culture/Propagation
92-003531
Disease Susceptibility
92-003199
DNA
92-002717
Endocrinology
92-002414
Environmental Impacts
92-003531
Exploitation Rates
92-003537
Fingerling Stocking
92-003531
Gas Bubble Disease
92-002533
Gas Supersaturation
92-002533
Genetic Strains
92-002717
Genetics
92-003537
Hatchery Releases
92-003531
Hatchery/Wild Populations
92-003531
92-003537
Hormones
92-002414
Hybridization
92-003199
92-003537
Lamprey Parasitism
92-003007
Lipid Metabolism
92-002512
Management/Research--Lakes
92-003597
Metabolism
92-002414
Mitochondria
92-002717
Multispecies Management
92-003597
Nutrition
92-002512
Parasites/Diseases
92-002533
92-003007
92-003199
Protein Metabolism
92-002512
Stocking/Introductions
92-003531

...CONTINUED...
Salvelinus namaycush
Stocking/Introductions
92-003537
Stress
92-002415
Thermal Tolerance
92-002484
Thyroid Gland
92-002414
Viral Diseases
92-003199
Sarda chiliensis chiliensis
Anoplocotyloides chorrillensis
92-003241
Anoplocotyloides papillatus
92-003241
Caballerocotyla australis
92-003241
Callorhynchocotyle marplatensis
92-003241
Parasites/Diseases
92-003241
Trematodes
92-003241
Sardina pilchardus
Digestive System
92-002390
Early Development
92-002390
Histology
92-002390
Muscle Proteins
92-002410
Rigor Mortis
92-002410
Sardinella eba
Smoking Fish
92-003759
Storage Effects
92-003759
Sardinops
Spawning
92-002933
Temperature
92-002933
Upwelling
92-002933
Sardinops caerula
Abundance/Factors of
92-003722
Foods/Feeding
92-003722
Management/Research--Marine
92-003722
Trophic Relationships
92-003722
Sardinops sagax sagax
Foods/Feeding
92-002989
Trophic Relationships
92-002989
Scaphirhynchus
Early Development
92-002345
Evolution
92-002345
Jaws
92-002345
Scardinius erythrophthalmus
Acidification
92-003314
Age/Growth
92-002656

...CONTINUED...
Scardinius erythrophthalmus
Bioenergetics
92-002656
Fish Control/Removal
92-003646
Foods/Feeding
92-002656
92-002864
92-003646
Hybridization
92-002684
92-002734
Karyotypes
92-002734
Management/Research--Lakes
92-003646
Meristic Studies
92-002684
Metabolism
92-002656
Predator/Prey Relationships
92-002864
Starvation
92-002656
Trophic Relationships
92-003646
Scaridae
Culture/Propagation
92-002154
Foods/Feeding
92-002154
Site Suitability
92-002154
Scarus croicensis
Ciguatera
92-002988
Public Health Problems
92-002988
Trophic Relationships
92-002988
Sciaenops ocellatus
Age/Growth
92-002441
92-002609
Cage Culture
92-002155
Culture/Propagation
92-002155
92-002164
92-002199
92-002230
92-003506
Distribution/Vertical
92-002819
DNA
92-002441
Economics
92-002164
Feeding Experiments
92-002199
Feeds
92-002199
92-002230
Larvae
92-002155
Larval Behavior
92-002819
Management/Research--Marine
92-002164
92-003552
92-003562
Musculature
92-002441

...CONTINUED...
Sciaenops ocellatus
Nutrition
92-002609
Photoperiodism
92-002819
Pond Culture
92-003506
Production
92-002155
92-003506
Proteins
92-002609
RNA
92-002441
Stock Assessment
92-003562
Supplemental Stocking
92-002164
92-003552
92-003562
Survival
92-003552
Scleropages formosus
Aquariums
92-002237
Culture/Propagation
92-002237
Scolopsis monogramma
Encotyllabe caballeroi
92-003232
Parasites/Diseases
92-003232
Trematodes
92-003232
Scomber australasicus
Age/Growth
92-003254
Kuhnia scombri
92-003254
Parasites/Diseases
92-003254
Trematodes
92-003254
Scomber japonicus
Distribution/Seasonal
92-002958
Movements
92-002958
Nets/Gill Nets
92-003574
Nets/Purse Seines
92-003574
Scomber scombrus
Commercial Fishing
92-003741
Economics
92-003741
Management/Research--Marine
92-003741
Multiple Use
92-003741
Recreational Benefits
92-003741
Scomberesox saurus saurus
Larval Drift
92-003742
Recruitment
92-003742
Scomberomorus cavalla
Age/Growth
92-003086
Competition
92-003589

...CONTINUED...
Scomberomorus cavalla
Interspecies Relationships
92-003589
Management/Research--Marine
92-003589
Marking/Tagging
92-003086
Mortality Rates
92-003086
Stock Assessment
92-003589
Scomberomorus maculatus
Competition
92-003589
Interspecies Relationships
92-003589
Management/Research--Marine
92-003589
Stock Assessment
92-003589
Scombridae
Brain
92-002644
Enzymes
92-002644
Eyes
92-002644
Harvest
92-003716
Life History/General
92-003716
Management/Research--Marine
92-003716
Thermogenic Tissue
92-002644
Scopelarchus analis
Eyes
92-002580
Pigments
92-002580
Scophthalmus maximus
Bioaccumulation
92-003411
Cadmium
92-003411
Heavy Metals
92-003411
Infectious Pancreatic Necrosis
92-003209
Parasites/Diseases
92-003209
Selenium
92-003411
Sperm
92-002629
Viral Diseases
92-003209
Scophthalmus rhombus
Bothriocephalus barbatus
92-003258
Cestodes
92-003258
Parasites/Diseases
92-003258
Scorpaena porcus
Evolution
92-002555
Proteins
92-002555
Scyliorhinus caniculus
Endocrinology
92-002444
Peptides
92-002444
Scyliorhinus retifer
Reproduction
92-002943
Sebastes
Age/Growth
92-002928
Fecundity
92-002928
Groundfish
92-002311
Management/Research--Marine
92-002311
Maturation
92-002928
Recruitment
92-002311
Wind
92-002311
Sebastes atrovirens
Morphometry
92-002323
Species Identification
92-002323
Sebastes inermis
Morphometry
92-002323
Species Identification
92-002323
Sebastes jordani
Age/Growth
92-003032
Early Development
92-003032
Otoliths
92-003032
Sebastes joyneri
Morphometry
92-002323
Species Identification
92-002323
Sebastes marinus
Variation Studies
92-002742
Sebastes mentella
Variation Studies
92-002742
Sebastes thompsoni
Morphometry
92-002323
Species Identification
92-002323
Sebastes ventricosus
Morphometry
92-002323
Species Identification
92-002323
Sebastes viviparus
Variation Studies
92-002742
Semotilus atromaculatus
Distribution/Geographical
92-002358
Genetic Diversity
92-003305
Heavy Metals
92-003305
Population Genetics
92-003305
Species Identification
92-002358
Taxonomy
92-002358
Semotilus thoreauianus
Distribution/Geographical
92-002358

...CONTINUED...
Semotilus thoreauianus
Species Identification
92-002358
Taxonomy
92-002358
Seriola quinqueradiata
Bacterial Diseases
92-003145
92-003149
Bioassay Techniques
92-002744
Chemoreception
92-003569
Fish Attractants
92-003569
Immune Response
92-002744
92-003149
Lymphocytes
92-002744
Parasites/Diseases
92-003145
92-003149
Pasteurella piscicida
92-003149
pH Regulation
92-003384
Red Tides
92-003384
Streptococcus
92-003145
92-003149
Toxic Algae
92-003384
Serranus aequidens
Age/Growth
92-003023
Serranus scriba
Evolution
92-002555
Proteins
92-002555
Serranus subligarius
Hermaphroditism
92-002576
Reproductive System
92-002576
Steroids
92-002576
Serrasalmus
Anacanthorus
92-003240
92-003267
Parasites/Diseases
92-003240
92-003267
Trematodes
92-003240
92-003267
Serrasalmus nattereri
Anacanthorus
92-003240
92-003267
Parasites/Diseases
92-003240
92-003267
Trematodes
92-003240
92-003267
Serrasalmus spilopleura
Evolution
92-002686
Karyotypes
92-002686
...CONTINUED...
Serrasalmus spilopleura
Taxonomy
92-002686
Variation Studies
92-002686
Sillago analis
Foods/Feeding
92-002782
Management/Research--Marine
92-002782
Mangroves
92-002782
Predator/Prey Relationships
92-002782
Seagrass Beds
92-002782
Sillago ciliata
Culture/Propagation
92-002307
Sperm Preservation
92-002307
Sillago japonica
Photoperiodism
92-002794
Spawning
92-002794
Temperature
92-002794
Siluridae
Head
92-002355
Silurus asotus
Heart
92-002523
Peptides
92-002523
Siniperca chuantsi
Acanthocephala
92-003217
Hebesoma violentum
92-003217
Parasites/Diseases
92-003217
Solea solea
Commercial Fishing
92-003706
Discarded Bycatch
92-003706
Harvest
92-003706
Management/Research--Estuaries
92-003706
Soleidae
Distribution/Geographical
92-003107
Fish Preservation
92-003753
Habitat Selection
92-003107
Storage Effects
92-003753
Sparisoma
Foods/Feeding
92-003016
Habitat Selection
92-003016
Sparisoma cretense
Abundance/Factors of
92-003076
Disturbances
92-003076
Management/Research--Marine
92-003076

...CONTINUED...
Sparisoma cretense
Species Diversity
92-003076
Sparus auratus
Bacterial Diseases
92-003147
Foods/Feeding
92-003004
Maturation
92-002610
Muscle Proteins
92-002410
Parasites/Diseases
92-003147
Pasteurella piscicida
92-003147
Predator/Prey Relationships
92-003004
Rigor Mortis
92-002410
Sex Reversal
92-002610
Sphyraena flavicauda
Distribution/Geographical
92-003051
Exotic Species
92-003051
Sphyrna lewini
Activity Patterns
92-002837
Habitat Selection
92-002837
Sphyrna tiburo
Activity Patterns
92-002836
Maturation
92-002579
Reproduction
92-002835
Reproductive Cycle
92-002579
Reproductive System
92-002579
Spermatogenesis
92-002579
Spicara flexuosa
Age/Growth
92-003035
Condition Factors
92-003035
Otoliths
92-003035
Spinachia spinachia
Early Development
92-002810
Foods/Feeding
92-002810
92-002987
Predator/Prey Relationships
92-002810
92-002987
Squalus
Enzymes
92-002495
Maturation
92-002495
Sperm
92-002495
Squalus acanthias
Activity Patterns
92-003008
Enzymes
92-002470

...CONTINUED...
Squalus acanthias
Foods/Feeding
92-003008
Ion Transport
92-002470
Kidneys
92-002470
Maturation
92-002431
Predator/Prey Relationships
92-003008
Reproductive System
92-002641
Spermatogenesis
92-002431
Steroids
92-002431
92-002641
Squatina californica
Territorial Behavior
92-002789
Squatina japonica
Territorial Behavior
92-002789
Stalix
Life History/General
92-002880
Steatocranus casuarius
Aquariums
92-002253
Culture/Propagation
92-002253
Stenodus leucichthys
Early Development
92-002462
Osmoregulation
92-002462
Salinity
92-002462
Stenotomus chrysops
Electrophysiology
92-002597
Musculature
92-002596
92-002597
Swimming Performance
92-002596
92-002597
Temperature
92-002596
92-002597
Stizostedion canadense
Culture/Propagation
92-002125
Feeding Experiments
92-002125
Hybridization
92-002125
Pond Culture
92-002125
Stizostedion lucioperca
Abundance/Factors of
92-002815
Age/Growth
92-003038
92-003590
Cannibalism
92-002973
Competition
92-002815
Distribution/Factors of
92-002815
Early Development
92-003038

...CONTINUED...
Stizostedion lucioperca
Foods/Feeding
92-002973
Management/Research--Lakes
92-002973
Management/Research--Marine
92-003590
Multispecies Management
92-003590
Nets/Gill Nets
92-003590
Nets/Netting
92-003590
Predator/Prey Relationships
92-002815
Regulations/Fishing Gear
92-003590
Stocking/Introductions
92-002973
Trophic Relationships
92-002973
Stizostedion vitreum
Abundance/Factors of
92-003512
Bothriocephalus cuspidatus
92-003216
Bothriocephalus formosus
92-003216
Catch Per Unit Effort
92-003631
Cestodes
92-003216
Condition Factors
92-003631
Culture/Propagation
92-002125
Feeding Experiments
92-002125
Harvest
92-003631
Hybridization
92-002125
Management/Research--Lakes
92-003512
92-003631
Mortality Rates
92-003081
Parasites/Diseases
92-003216
Pond Culture
92-002125
Population Studies
92-003081
Recruitment
92-003081
Regulations/Catch Limits
92-003512
Stizostedion vitreum vitreum
Age/Growth
92-002121
Ammonia
92-002116
Culture/Propagation
92-002116
92-002121
Fertilization/Soil and Water
92-002121
Fingerling Production
92-002116
Foods/Feeding
92-003011
Habitat Evaluation
92-003684

...CONTINUED...
Stizostedion vitreum vitreum
Habitat Selection
92-003684
Invertebrate Forage
92-002121
Management/Research--Rivers and Streams
92-003684
Mouth Size
92-003011
Multivariate Analysis
92-003684
Population Studies
92-003684
Rearing Density
92-002116
Survival
92-002121
Temperature
92-002116
Water Quality
92-002116
Stolothrissa tanganyikae
Management/Research--Lakes
92-003639
Population Studies
92-003639
Stock Assessment
92-003639
Strangomera bentincki
Hysterothylacium
92-003119
Nematodes
92-003119
Parasites/Diseases
92-003119
Sturisoma aureum
Early Development
92-002381
Eggs
92-002381
Reproduction
92-002381
Stylephorus chordatus
Eyes
92-002580
Pigments
92-002580
Symphurus atricauda
Life History/General
92-002876
Symphysodon
Culture/Propagation
92-002238
Parasites/Diseases
92-003190
Protoopalina symphysodonis
92-003190
Protozoan Diseases
92-003190
Spawning
92-002238
Synanceia horrida
Biochemical Composition
92-002588
Ichthyotoxin
92-002588
Venom Gland
92-002588
Synaphobranchus kaupi
Habitat Selection
92-002776
Management/Research--Marine
92-002776

...CONTINUED...
Synaphobranchus kaupi
Microhabitat
92-002776
Synbranchidae
Distribution/Geographical
92-003107
Habitat Selection
92-003107
Synbranchus
Air Breathing
92-002483
Cardiovascular System
92-002483
Heart
92-002483
Metabolic Rates
92-002483
Syngnathidae
Early Development
92-002951
Parental Behavior
92-002951
Syngnathus scovelli
Embryology
92-002411
Reproductive System
92-002411
Synodus jenkinsi
Age/Growth
92-003023
Synodus lucioceps
Age/Growth
92-003023
Tandanus tandanus
Endosulfan
92-003413
Insecticides
92-003413
Tasmanogobius
Fish Lists/Keys
92-003097
Tasmanogobius gloveri
New Species
92-003097
Tasmanogobius lasti
New Species
92-003097
Tateurdina ocellicauda
Aquariums
92-002235
Culture/Propagation
92-002235
Spawning
92-002235
Tetrapturus albidus
Catch Per Unit Effort
92-003497
Creel Census
92-003497
Management/Research--Marine
92-003497
Tetrapturus audax
Age/Growth
92-003037
Brain
92-002644
Enzymes
92-002644
Eyes
92-002644
Length-Weight Relationships
92-003037
Management/Research--Marine
92-003037
...CONTINUED...
Tetrapturus audax
Stock Assessment
92-003037
Thermogenic Tissue
92-002644
Tetrapturus pfluegeri
Brain
92-002644
Enzymes
92-002644
Eyes
92-002644
Thermogenic Tissue
92-002644
Thalassoma bifasciatum
Ciguatera
92-002988
Fertilization
92-002585
Foods/Feeding
92-002772
Interspecies Relationships
92-002772
Management/Research--Marine
92-002915
Mate Selection
92-002585
Parental Behavior
92-002772
Population Studies
92-002915
Public Health Problems
92-002988
Recruitment
92-002915
92-002930
Reef Fish Communities
92-002915
Reproductive Cycle
92-002585
Spawning
92-002930
Sperm
92-002585
Territorial Behavior
92-002772
Trophic Relationships
92-002988
Thalassoma pavo
Polymorphism
92-002950
Population Studies
92-002950
Reproduction
92-002950
Spawning
92-002950
Thalassoma planifrons
Foods/Feeding
92-002772
Interspecies Relationships
92-002772
Parental Behavior
92-002772
Territorial Behavior
92-002772
Theragra chalcogramma
Cannibalism
92-002981
Egg Composition
92-002662
Eggs
92-002662

...CONTINUED...
Theragra chalcogramma
Embryology
92-002662
Food Supply
92-003000
Foods/Feeding
92-002981
92-003000
Habitat Selection
92-002882
Harvest
92-003737
Larval Behavior
92-003000
Management/Research--Marine
92-003737
Nursery Areas
92-002882
Population Studies
92-003737
Recruitment
92-002882
Trophic Relationships
92-002981
Thunnus albacares
Fishing Gear
92-003614
Gill Rakers
92-002386
Harvest
92-003508
92-003614
Longlines
92-003614
Management/Research--Marine
92-003508
92-003614
Morphometry
92-002386
Thermoregulation
92-002453
Variation Studies
92-002386
Zoogeography
92-002386
Thunnus maccoyii
Age/Growth
92-003594
Mark/Recapture
92-003595
Marking/Tagging
92-003594
Mortality Rates
92-003595
Movements
92-003595
von Bertalanffy Growth Function
92-003594
Thunnus obesus
Fishing Gear
92-003614
Harvest
92-003614
Longlines
92-003614
Management/Research--Marine
92-003614
Thunnus thynnus
Bioaccumulation
92-003293
Economics
92-003601
Harvest
92-003601
...CONTINUED...
Thunnus thynnus
International Fisheries
92-003601
Management/Research--Marine
92-003601
Thymallus arcticus
Eggs
92-002369
Foods/Feeding
92-002833
Movements
92-002833
Vitellogenin
92-002369
Thymallus thymallus
Digestive System
92-002589
Electrofishing
92-003775
Enzymes
92-002589
Hematology
92-002501
Management/Research--Ponds
92-003775
Management/Research--Rivers and Streams
92-002778
Microhabitat
92-002778
Migration
92-002778
Parasites/Diseases
92-003174
Population Studies
92-003775
Proliferative Kidney Disease
92-003174
Protozoan Diseases
92-003174
Sampling
92-003775
Season
92-002501
Temperature
92-002589
Tilapia
Bird Predation
92-002991
Imprinting
92-002844
Kin Recognition
92-002844
Predator/Prey Relationships
92-002991
Tilapia aurea
Age/Growth
92-002210
92-003020
Brackishwater Culture
92-002114
Culture/Propagation
92-002114
92-002193
92-002210
92-002213
92-003020
Diets
92-002210
92-002213
Feeds
92-002193
Fingerling Production
92-002193

...CONTINUED...
Tilapia aurea
Hybridization
92-002114
92-002193
Magnesium
92-002210
Management/Research--Reservoirs
92-003020
Maximum Sustainable Yield
92-003020
Nutrition
92-002210
Nutritional Diseases
92-002213
Parasites/Diseases
92-002213
Pond Culture
92-003020
Rearing Density
92-003020
Site Suitability
92-002114
Vitamins
92-002213
Water Quality
92-003020
Tilapia galilaea
Egg Predation
92-002849
Parental Behavior
92-002849
Tilapia hornorum
Brackishwater Culture
92-002114
92-002150
Culture/Propagation
92-002114
92-002150
Egg Collection
92-002150
Egg Production
92-002150
Enzymes
92-002468
Hybridization
92-002114
92-002150
Musculature
92-002468
Site Suitability
92-002114
Tilapia leucosticta
Stocking/Introductions
92-003553
Tilapia melanopleura
Stocking/Introductions
92-003553
Tilapia melanotheron
Egg Predation
92-002849
Tilapia mossambica
Age/Growth
92-002506
92-002530
92-002535
92-002624
Altitude
92-002143
Amino Acids
92-002197
Bacterial Flora
92-002112
Bioenergetics
92-002530

...CONTINUED...
Tilapia mossambica
Brackishwater Culture
92-002114
92-002149
92-002150
92-002197
92-002506
92-003269
Culture/Propagation
92-002112
92-002114
92-002134
92-002143
92-002149
92-002150
92-002197
92-002506
92-002624
92-003269
Diets
92-002197
Digestive System
92-002598
92-002599
92-002637
Early Development
92-002624
Egg Collection
92-002150
Egg Production
92-002150
Endocrinology
92-002428
Enzymes
92-002468
Fatty Acids
92-002637
Fertilization
92-002134
Fingerling Production
92-002197
Fish Preservation
92-003751
Food Digestibility
92-002599
Fry Production
92-002149
Growth Hormone
92-002428
Growth Stimulants
92-002506
92-002535
Hatching
92-002624
Herbicides
92-003447
Hormones
92-002506
92-002535
92-002598
92-002599
92-002653
Hybridization
92-002114
92-002134
92-002143
92-002149
92-002150
92-002197
92-003269
Incubation
92-002624
Irradiation
92-003751

...CONTINUED...
Tilapia mossambica
Maturation
92-002653
Musculature
92-002468
Neobenedenia melleni
92-003269
Nutrition
92-002197
92-002598
92-002637
Parasites/Diseases
92-003269
Pond Culture
92-002112
Reproductive Cycle
92-002653
Salinity
92-002428
92-002599
Sewage Effluents
92-002112
Site Suitability
92-002114
92-002143
Spawning Techniques
92-002134
Storage Effects
92-003751
Temperature
92-002143
92-002530
92-002624
Testosterone
92-002506
92-002535
92-002598
Thyroid Gland
92-002599
Thyroxine
92-002598
92-002653
Treatment
92-003269
Trematodes
92-003269
Tropics
92-002143
Tilapia nilotica
Age/Growth
92-002128
92-002129
92-002668
Bacteria
92-002135
92-002207
Biofiltration
92-002293
Brackishwater Culture
92-002114
Cage Culture
92-002128
Cardiovascular System
92-002359
Computer Applications
92-002276
Culture/Propagation
92-002114
92-002123
92-002128
92-002129
92-002130
92-002134

...CONTINUED...
Tilapia nilotica
Culture/Propagation
92-002135
92-002147
92-002185
92-002193
92-002207
92-002273
92-002276
92-002293
92-002569
Diazinon
92-003425
DNA
92-002755
Early Development
92-002374
Enzymes
92-002468
92-002479
92-002569
Extension Services
92-002276
Feeding Experiments
92-002185
Feeds
92-002135
92-002185
92-002193
92-002207
92-002569
Fertilization
92-002134
Fertilization/Soil and Water
92-002123
92-002129
Fingerling Production
92-002193
Food Digestibility
92-002569
Foods/Feeding
92-002668
Hormones
92-002273
Hybridization
92-002114
92-002134
92-002193
Insecticides
92-003425
Invertebrate Forage
92-002207
Manure
92-002135
92-002185
Musculature
92-002359
92-002468
Nets/Seines
92-003571
Osteology
92-002374
Otoliths
92-002401
92-002667
92-002668
Oxygen
92-002129
92-002147
Photoperiodism
92-002667
Pond Culture
92-002123

...CONTINUED...
Tilapia nilotica
Pond Culture
92-002128
92-002129
92-002130
92-002147
92-002273
Population Genetics
92-002755
Predator/Prey Relationships
92-002977
Public Health Problems
92-002135
Pyrethroids
92-003425
Rearing Density
92-002128
Recirculating Systems
92-002293
Recruitment
92-002977
Sampling
92-003571
Sex Reversal
92-002273
Site Suitability
92-002114
92-002130
Spawning Techniques
92-002134
Species Identification
92-002755
Stocking/Introductions
92-003553
Storage Effects
92-002135
Temperature
92-002479
92-002668
Thermal Tolerance
92-002479
Water Quality
92-002123
92-002147
92-002293
Tilapia rendalli
Alkalinity
92-002119
Culture/Propagation
92-002119
Foods/Feeding
92-002309
Plankton
92-002309
Trophic Relationships
92-002309
Water Quality
92-002119
Tilapia shirana
Alkalinity
92-002119
Culture/Propagation
92-002119
Water Quality
92-002119
Tilapia simonis simonis
Enzymes
92-002479
Temperature
92-002479
Thermal Tolerance
92-002479
Tilapia sparrmanii
Atrazine
92-003374
...CONTINUED...
Tilapia sparrmanii
Bioaccumulation
92-003374
Heavy Metals
92-003374
Iron
92-003374
Zinc
92-003374
Tilapia urolepis
Altitude
92-002143
Amino Acids
92-002197
Brackishwater Culture
92-002149
92-002197
92-003269
Culture/Propagation
92-002143
92-002149
92-002197
92-003269
Diets
92-002197
Fingerling Production
92-002197
Fry Production
92-002149
Hybridization
92-002143
92-002149
92-002197
92-003269
Neobenedenia melleni
92-003269
Nutrition
92-002197
Parasites/Diseases
92-003269
Site Suitability
92-002143
Temperature
92-002143
Treatment
92-003269
Trematodes
92-003269
Tropics
92-002143
Tilapia zilli
Enzymes
92-002479
Heavy Metals
92-003365
Lead
92-003365
Stocking/Introductions
92-003553
Temperature
92-002479
Thermal Tolerance
92-002479
Treatment
92-003365
Tinca tinca
Copper Sulfate
92-003421
Heavy Metals
92-003421
Parasites/Diseases
92-003234
Sanguinicola inermis
92-003234

...CONTINUED...
Tinca tinca
Trematodes
92-003234
Trachurus
Forecasting
92-003618
Statistical Methods
92-003618
Trachurus symmetricus
Catch Per Unit Effort
92-003734
Management/Research--Marine
92-003734
Nets/Purse Seines
92-003734
Population Studies
92-003734
Trematomus eulepidotus
Life History/General
92-002881
Trichogaster trichopterus
Gonadotropin
92-002451
Induced Maturation
92-002451
Steroids
92-002451
Trichopsis vittatus
Aquariums
92-002247
Culture/Propagation
92-002247
Tripterygion delaisi
Distribution/Geographical
92-003049
Tripterygion melanurus
Distribution/Geographical
92-003049
Trisopterus luscus
Commercial Fishing
92-003706
Discarded Bycatch
92-003706
Harvest
92-003706
Management/Research--Estuaries
92-003706
Trisopterus minutus capelanus
Biosorption
92-003335
Heavy Metals
92-003335
Mercury
92-003335
Public Health Problems
92-003335
Umbra krameri
Abundance/Factors of
92-003074
Air Breathing
92-003074
Coloration
92-003074
Habitat Alterations
92-003074
Habitat Protection
92-003074
Management/Research--Rivers and Streams
92-003074
Reproduction
92-003074
Spawning
92-003074
Urophycis chesteri
Habitat Selection
92-002776
Management/Research--Marine
92-002776
Microhabitat
92-002776
Varicorhinus capoeta
Markewitschiana triaxonis
92-003243
Parasites/Diseases
92-003243
Trematodes
92-003243
Vimba elongata
Foods/Feeding
92-002857
Predator/Prey Relationships
92-002857
Vimba vimba
Biological Indicators
92-003676
Dams
92-002675
Diplozoon markewitschi
92-003238
Foods/Feeding
92-002864
Habitat Evaluation
92-003676
Helminths
92-003238
Hybridization
92-002675
Management/Research--Rivers and Streams
92-003676
Parasites/Diseases
92-003238
Predator/Prey Relationships
92-002864
Sense Organs
92-002350
Speciation
92-002675
Taste Reception
92-002350
Trematodes
92-003238
Wallago attu
Ergasilus malnadensis
92-003268
Parasites/Diseases
92-003268
Parasitic Copepods
92-003268
Xiphias gladius
Biosorption
92-003405
Brain
92-002644
Enzymes
92-002644
Eyes
92-002644
Foods/Feeding
92-002970
Gear Efficiency
92-003578
Heavy Metals
92-003405
Longlines
92-003578

...CONTINUED...
Xiphias gladius
Mercury
92-003405
Metabolism
92-002413
Parasites/Diseases
92-003253
Parasitic Copepods
92-003253
Pennella crassicornis
92-003253
Public Health Problems
92-003405
Thermogenic Tissue
92-002413
92-002644
Xiphophorus helleri
Brain
92-002548
Disease Susceptibility
92-002706
Endocrinology
92-002548
Genetic Markers
92-002706
Isozymes
92-002706
Parasites/Diseases
92-002706
Peptides
92-002548
Pituitary Gland
92-002548
Polymorphism
92-002706
Tumors
92-002706
Xiphophorus maculatus
Brain
92-002548
Disease Susceptibility
92-002690
92-002706
Endocrinology
92-002548
Genetic Markers
92-002706
Genetic Strains
92-002690
Ichthyophthirius multifiliis
92-002690
Isozymes
92-002706
Parasites/Diseases
92-002690
92-002706
Peptides
92-002548
Pituitary Gland
92-002548
Polymorphism
92-002706
Protozoan Diseases
92-002690
Tumors
92-002706
Xiphophorus variatus
Disease Susceptibility
92-002690
Genetic Strains
92-002690
Ichthyophthirius multifiliis
92-002690
...CONTINUED...
Xiphophorus variatus
Parasites/Diseases
92-002690
Protozoan Diseases
92-002690
Xyrauchen texanus
Endangered/Threatened Species
92-003790
92-003800
Laws/Law Enforcement
92-003800
Xystreurys liolepis
Life History/General
92-002876
Zebrus zebrus
Distribution/Geographical
92-003048
92-003049
Zoarces viviparus
Cestodes
92-003218
Parasites/Diseases
92-003218
Zosterisessor ophiocephalus
Aroclor
92-003408
Benzo(a)pyrene
92-003408
Cytochrome P450
92-003408
Polychlorinated Biphenyls
92-003408

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-673-083/60004

SUBSCRIPTION INFORMATION

For current subscription price contact:

The Government Printing Office
Superintendent of Documents
Washington, DC 20402

"Subscription to *Fisheries Review*" should be clearly written on the check.

U.S. Federal Agencies in wildlife-related fields and individuals or agencies who exchange domestic or foreign publications may receive free subscriptions to *Fisheries Review* by writing to:

Office of Information Transfer
Fisheries Review - Wildlife Review
U.S. Fish and Wildlife Service
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525-5589

CHANGE OF ADDRESS

If SFA is the first entry on the first line of your address label, send your new address and your former address exactly as it appears on your mailing label to:

The Government Printing Office
Superintendent of Documents
Washington, DC 20402

If a 12-character code appears on the first line of the label, send your new address and your former address exactly as it appears on your mailing label to:

Office of Information Transfer
Fisheries Review - Wildlife Review
U.S. Fish and Wildlife Service
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525-5589

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U. S. administration.

UNITED STATES DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Office of Information Transfer
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525-5589

PRESORTED
SPECIAL FOURTH-CLASS RATE
POSTAGE & FEES PAID
USDI
PERMIT No. G-77